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EXPLORATIONS INTO THE COLLEGE PLANS AND EXPERIENCES OF HIGH SCHOOL GRADUATES, A STATEWIDE INQUIRY.

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THIS STUDY ATTEMPTED TO DISCOVER THE CIRCUMSTANCES WHICH BRING ABOUT SCHOOL AND COMMUNITY DIFFERENCES IN THE PROPORTION OF WISCONSIN HIGH SCHOOL GRADUATES WHO GO TO COLLEGE. THE CHARACTERISTICS OF HIGHLY ABLE YOUTHS WHO DID NOT CONTINUE THEIR SCHOOLING BEYOND HIGH SCHOOL WERE COMPARED WITH THOSE WHO BEGAN COLLEGE, COMPLETED COLLEGE, AND CONTINUED IN GRADUATE SCHOOL. QUESTIONNAIRES WERE USED TO GATHER DATA ON 500 WISCONSIN HIGH SCHOOL GRADUATES OF THE 1957 CLASS. HIGH SCHOOL GRADUATES WHO ELECTED TO ATTEND COLLEGE DIFFERED FROM THOSE WHO DID NOT IN THE FOLLOWING CHARACTERISTICS--(1) SCHOLASTIC APTITUDE, (2) SCHOLASTIC ACHIEVEMENT, (3) OCCUPATION OF PARENTS, (4) EDUCATIONAL ATTAINMENT OF PARENTS, (5) ECONOMIC STATUS OF FAMILY, (6) ENCOURAGEMENT BY TEACHERS, (7) ENCOURAGEMENT BY PARENTS, (8) PLANS OF CLOSE FRIENDS, AND (9) OPINIONS ABOUT THE VALUE OF GOING TO COLLEGE. (TC)

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J. Kenneth Little The University of Wisconsin

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EXPLORATIONS INTO THE COLLEGE PLANS AND EXPERIENCES OF HIGH SCHOOL GRADUATES

A STATE-WIDE INQUIRY

U. S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
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THE UNIVERSITY OF WISCONSIN

September, 1959

The research reported herein was performed pursuant to a contract with the U. S. Office of Education, Department of Health, Education, and Welfare

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FOREWORD

This report presents two follow-up studies of an earlier research project – "A State-Wide Inquiry Into the Decisions of Youth About Education Beyond High School." Because the follow-up studies relate closely to the original study in procedure and findings, a condensed version of the original study without most of its supporting statistical tables is presented at the beginning of this report. Thus, the reader will be able to grasp the scope of the entire research project. The two follow-up studies, although they are quite different in purpose and approach, and were not thought to be related, have turned out to be surprisingly related and corroborative in some of their findings.

Many people have given helpful suggestions and counsel. Others have given hours of work in machine operation, statistical analysis, and preparation of the data and manuscript. I am especially grateful for the research assistance given by Alexander Donaldson, Robert Fenske, and Norman Fintel, project assistants. I also thank Barbara Bilderback and Elizabeth Hough who gave many hours to the details of preparing this report.

As principal investigator, I have assumed responsibility for the writing of this report. Recognition is given to the work of the project assistants in the part of the report in which they developed the research information.

This entire research project was undertaken through the cooperative research program of the United States Office of Education, Department of Health, Education, and Welfare. I am grateful to the administration of The University of Wisconsin, the School of Education, and the Department of Education for releasing me from other assignments to undertake and complete this report.

Finally, I salute the staff of the State Department of Public Instruction, the principals of Wisconsin's high schools, and most of all the thousands of Wisconsin high school graduates and hundreds of parents who cooperated so magnificently in helping us tell this story.

J. Kenneth Little

Madison, Wisconsin
September 1, 1959

INTRODUCTION

This study was initiated as one of a series of studies in the State of Wisconsin to discover facts and information needed for the planning of state-wide programs of higher education in Wisconsin. There was need to know the extent to which Wisconsin youth are continuing their education beyond high school; whether significant numbers of promising high school scholars are not taking advantage of the state's present educational facilities and programs; what part of Wisconsin's youth earns college degrees; and, in general, the situations and circumstances which hinder or facilitate the education of Wisconsin's youth beyond high school. Previous studies had given important findings and general suggestions on many of these points. The need and opportunity were present to extend some aspects of these studies in scope and depth, and to provide comprehensive information upon an entire "crop" of high school and college graduates of a Midwestern state — Wisconsin. To this venture, the high schools and colleges of the state, both public and private, gave a high degree of cooperation. The study in the high schools was developed in cooperation with the Wisconsin Department of Public Instruction and the research committee of the Wisconsin Association of Secondary School Principals. Officials of the private and parochial high schools were invited to participate in the study, and insofar as the study was appropriate to the purposes of their schools, these schools participated. The Coordinating Committee for Higher Education in Wisconsin and its research staff helped in the development of the college studies. The privately supported colleges in Wisconsin have joined in most of these studies of state-wide scope, as in this one. This excellent teamwork has made it possible to present in this study facts and findings about the youth of Wisconsin and their educational plans which are reliable and comprehensive. These facts have general significance for educational planning and counselling of all youth, teachers, and parents.

The study was developed to provide answers to, or new information about, the following general questions.

1. Who goes to college in Wisconsin? Who does not?
2. What circumstances or conditions influence the decisions of youth to continue their schooling beyond high school, or not to continue?
3. Do the college plans of high school graduates materialize?
4. To what extent are youth of high potential achievement identified by such measures as rank in class and intelligence test scores?
5. Do high ability youth who do not plan to go to school change their plans later? If not, what types of work do they enter?
6. To what extent do the most able college freshmen fail to complete their studies?

High School Survey

In January, 1957, a questionnaire was prepared to be completed by the seniors who would be graduating at the end of the spring term. This questionnaire asked the seniors (1) to indicate in some detail their plans beyond high school; (2) to provide information about the educational, occupational, and economic backgrounds of their parents; (3) to answer questions about the influence of teachers, parents, and friends upon their plans; (4) to indicate their interest and action in applying for admission to college, and for scholarships; (5) to show the pattern of subjects taken in high school; (6) to indicate their opinions about the value of going to college; and (7) to answer other miscellaneous questions. This form was prepared in cooperation with staff members of the Wisconsin Department of Public Instruction and in counsel with the research committee of the Wisconsin Association of Secondary School Principals.

The questionnaires were sent to the principals of all public and private high schools in Wisconsin, a total of 501 schools. The public high schools numbered 444, having 31,112 graduates. The private high schools numbered 57, having 5,059 graduates.

The high schools administered the questionnaire during the months of April and May, 1957, and returned the completed forms to the principal investigator of this study, either directly or through the Wisconsin Department of Public Instruction. Of the 501 Wisconsin high schools, 454 returned completed forms. Of these, 407 were public high schools, 91 per cent of the total number of public schools; 47 were private high schools, 84 per cent of their total. The number of graduates who completed the form was 34,151, or almost 95 per cent of the estimated 36,000 Wisconsin* high school seniors who graduated in the spring term, 1957. These returns included 96.3 per cent of the graduates of public schools and 89.5 per cent of the graduates of private schools.

The high school principals were asked to send with their completed forms: (1) a list of their graduates showing the scholastic rank in his class of each graduate; and (2) an identification of those graduates who, regardless of intelligence test score or rank in class, had shown unusual achievement, skill, or talent which should be developed by further training or education, and to indicate the field of excellence.

About 95 per cent of Wisconsin high schools, public and private, participate in a state-wide testing program administered through the Student Counselling Center of The University of Wisconsin. Through this program, the percentile scores on the Henmon-Nelson Test of Mental Ability were available for most of the graduates, and this information was opened to the investigator for the purposes of this study.

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* There is no official record of the total enrollment or number of graduates in Wisconsin private schools.

Working Sample

For purposes of the follow-up aspects of the study, and to facilitate the analysis of the total survey data, a working sample was drawn from the 34,151 questionnaires returned. This sample was composed of 5,675 questionnaires, approximately one-sixth of the total number. Each participating school is represented in the sample by one out of six of its graduates, the individuals from each school being chosen by use of a table of random numbers. This sample provided a reliable working model for many phases of the analysis of the total data, and furnished the population for the parental survey and follow-up study of scholastically talented youth who did not go to college.

Survey of Parents

In October and November, 1957, questionnaires were sent to the parents of the 5,675 graduates who were members of the "working sample." The purposes of this questionnaire were: (1) to learn whether the plans announced by the graduates in the spring had been followed or changed; and (2) to discover the desires and attitudes of parents regarding the education of their sons or daughters beyond high school, and about the value of college education in general. Replies were received from 2,780 parents (48.9 per cent of the "working sample").

Since there was special interest in the parents of youth who had high potential for college training, an intensive effort was made to get complete coverage of the parents of this group. Graduates were considered to have high college potential if they ranked in the top one-fourth of their high school graduating class and also scored in the top one-fourth of Wisconsin high school seniors on the Henmon-Nelson Test of Mental Ability. By special follow-up procedures using mail, telephone, and personal visit, replies from 96.7 per cent of this group were obtained.

Follow-up of Those Who Did Not Go to College

In January and February, 1958, follow-up questionnaires were sent to the scholastically talented youth who in the spring of 1957 indicated that they were not planning to go to college. Questionnaires were sent to 1,060 youth who had either: (1) ranked in the top one-fourth of their high school graduating class; (2) ranked in the top one-fourth of Wisconsin high school seniors; or (3) been specially identified by their high schools as having demonstrated unusual achievement or promise.

Replies were received in questionnaire form from 515, or 48 per cent, of this group. A post card follow-up which asked for abbreviated replies brought responses from an additional 214 graduates, or 69 per cent of the group. This questionnaire asked for a report upon their current activity, their satisfaction with their status, their plans, if any, for further training or education, and a new expression of their attitude toward the value of further education.

Study of College Graduates

At the close of the spring term, 1957, the graduates of Wisconsin's ten state colleges, The University of Wisconsin, the University of Wisconsin—Milwaukee, and sixteen of Wisconsin's privately controlled degree-granting colleges completed a brief questionnaire upon which they indicated their plans immediately beyond college graduation. From these data, it was possible to learn the proportion of graduates of Wisconsin colleges who plan to continue studies beyond the bachelor's degree, and the extent to which this group is assisted by scholarships, fellowships, or assistantships. Graduates earning the master's or doctor's degree were not included in this study. The data also revealed the part of the graduates who entered various occupational fields, the location of their positions, and their starting salaries. The number of graduating seniors who completed these questionnaires was 4,875, approximately 90 per cent of the students graduating from Wisconsin colleges with a bachelor's degree in the spring of 1957.

Study of the 1957 Graduates of The University of Wisconsin

A special study was made of the students who received the bachelor's degree from The University of Wisconsin in the spring of 1957. This study compared certain characteristics of the 1953 class of entering freshmen. University records provided basic information about the high school performance, scholastic aptitude, university achievement, and other background factors. This information enabled a search for factors which differentiated those who persisted to graduation from those who did not, and provided a measure of the part of high potential youth who enter the University but do not complete a degree. A comparison was also made of the part of the graduating class that planned to continue to graduate school with the other members of that class.

Machine Analysis

Most of these data were coded and punched for IBM machine analysis. Phases of the study which did not involve large numbers or studies of interrelationships, or in which the data involved free responses which did not permit machine coding and tabulation were tabulated without use of the machine procedure.

Since each part of this study involves different purposes, measures, and analyses, the specific procedures will be described in each section which reports findings.

N.B. Copies of the forms used for each part of the inquiry and letters of instruction to the high school principal are shown in Appendix B.

PLANS OF THE HIGH SCHOOL GRADUATES

The plans of the high school graduates are reported for two basic groups:

1. those who planned to continue their education beyond high school.
2. those who did not plan to continue their education beyond high school.

Each of these basic groups was found to have component groups which deserved individual attention. The graduates who planned to continue their education were: (1) those who planned to attend degree-granting colleges, and (2) those who planned to further their training through other types of schools or educational programs, such as commercial or business schools, nursing schools, beauty culture schools, and other trade or vocational schools or apprenticeship programs. The graduates who did not plan to continue their education were: (1) those who planned to get jobs, or work at home and (2) those (boys) who planned to enter military service; those (girls) who planned to marry. The number of girls indicating plans to marry, however, was very small, and these plans are combined in some parts of this study with the group labeled "jobs."

1. **What part of Wisconsin's high school graduates planned to attend college?** The graduates divided almost evenly between those who planned to continue their education and those who did not. About 15 per cent of the men who were entering military service told of plans to attend school afterward. Many of these men will receive, during military service, important technical training and general education, regardless of further schooling. So it is reasonable to conclude that high school graduation did not mark the end of schooling for at least one-half of the 1957 graduates of Wisconsin high schools.

Of the 45 per cent who were planning to continue their schooling, two out of three were planning to attend a degree-granting college. The difference between the boys and girls is noteworthy. A much larger part of the girls was planning to take training in schools or programs which do not result in degrees.

TABLE 1. Plans of the High School Graduates

PER CENT OF:	CONTINUING			NOT CONTINUING		
	Degree (%)	Nondegree (%)	Total (%)	Military (B) or Marriage (G)	Job (%)	Total (%)
BOYS	34	9	43	23	34	57
GIRLS	26	21	47	1	52	53
TOTAL (N = 30,782)	30	15	45	12	43	55

After stating their plans, the graduates were asked to indicate whether their plan included what they "would most like to do." If not, they were asked to state their preferred plan and the circumstances which had prevented them from following that plan. Of the girls, 85 per cent who were not continuing their schooling would have preferred to attend school; of the boys, 70 per cent would have liked to attend school. Less than 1 per cent of the graduates, boys or girls, who planned to attend college stated that they would like to get jobs; or, in the case of boys, to enter military service or to get jobs. The very small numbers who indicated dissatisfaction with their plans suggest that, by time of graduation, most of these boys and girls had accepted the circumstances which were shaping their decisions about further education.

2. What kinds of education or training were the graduates seeking?

a. *Students who were going to degree-granting colleges.* The current emphasis upon the needs for engineers, scientists, teachers, and nurses is clearly reflected in the plans of the graduates. Their choices show strong emphasis upon occupational and utilitarian objectives. The questionnaire, however, listed many occupational courses and fields, and the comparatively small part of the students who checked liberal arts as their field of interest should not be interpreted as a general lack of interest in that type of education. Most high school graduates who plan to attend college feel the need to express occupational goals. Indeed, in some specialized fields, they must.

TABLE 2. Fields of Interest of College-Going Graduates

FIELD OF INTEREST	BOYS (%)	GIRLS (%)
Agriculture	6	—
Business (or Commerce)	13	4
Engineering	32	—
Home Economics	—	7
Journalism	1	2
Law	2	—
Liberal Arts	10	15
Medical (Incl. Nursing)	7	10
Social Work	—	3
Teaching	9	39
Other	7	10
Undecided	13	10

Whatever the wisdom of the choices made, the overwhelming part of this group of graduates had specific fields of interest for further study. Only about one out of ten stated that he was "undecided" about the field of study that he planned to enter.

b. *Students who were entering nondegree programs.* Of the boys who planned to seek further training in programs not leading to college degrees, only 12 per cent checked the special field in which they were interested. The fields most frequently indicated were, in order: automotive, engineering, technician, business administration, draftsman, tool and die maker, electrician, and machinist.

Of the girls, 21 per cent indicated their fields of interest. Most frequently mentioned were, in order: practical nursing, secretarial science, cosmetology. In fact, 80 per cent of the girls indicated one of these three fields. Other fields mentioned were business machine operation, commercial art, and clerical.

These are fields which receive much advertising through newspapers, magazines, and other media of publicity. Sizeable numbers of these students, however, use the programs of Wisconsin's system of vocational schools to prepare themselves in these occupational fields.

3. **Where were the graduates planning to attend college?** Four out of five of the graduates planning to attend degree-granting colleges expected to enroll in Wisconsin colleges – boys, 79 per cent; girls, 77 per cent. Of those planning to attend Wisconsin's state-supported colleges, 52 per cent were going to the state university (at Madison, at the University of Wisconsin–Milwaukee, or at one of its Extension Centers), and 48 per cent, to one of the ten state colleges. The number of graduates who planned to enter county teachers' colleges (two-year schools) was about 3 per cent of the number going to degree-granting colleges. Between 35 per cent and 40 per cent of the graduates going to degree-granting colleges expected to enroll in privately supported colleges.

TABLE 3. Kinds of Schools the Graduates Planned to Attend

TYPE OF SCHOOL	BOYS (%)	GIRLS (%)
PUBLIC:		
University	31	17
State College	26	20
County Teachers' College	1	4
Vocational School	10	9
PRIVATE:		
University	9	5
Liberal Arts College	11	14
Business or Trade School	8	15
Other	4	16

BACKGROUND CHARACTERISTICS OF CONTINUING AND NONCONTINUING GRADUATES

The sections which follow compare the graduates who planned to continue their schooling with those who did not plan to continue schooling on the basis of several background factors. Those who were continuing their education are separated into two groups: (1) those who planned to enter degree-granting colleges; and (2) those who were continuing in other types of educational programs. The noncontinuing graduates are then separated into two sub-groups: (1) those who planned to get jobs, work at home, or had no definite plans; and (2) those (boys) who were entering military service; those (girls) who planned to marry. The comparison is made on each major factor for which the study yielded usable information. Those who planned to enter degree-granting colleges are identified in the tables and discussion as "college." Those who planned to enter other types of programs are identified as "school."

Mental Ability

The measures of mental ability used are scores on the Henmon-Nelson Test of Mental Ability. This test is used by approximately 95 per cent of Wisconsin high schools as part of a state-wide testing program. The tests are given annually to high school freshmen and juniors. The scores are reported as percentiles of all Wisconsin freshmen or juniors who have taken the test in a given year. The percentiles reported in this study are the scores of the 1957 graduates on the test which they took as juniors.

As shown in Table 4, the frequency of decision to continue schooling increases, as would be expected, with scores on the test of mental ability.

Of all boys planning to go to "college," 40 per cent ranked in the top one-fifth of all graduates, and 27 per cent ranked in the top one-tenth. Almost three-fourths of those who scored in the top one-tenth were headed toward college. Note that in each decile below the seventieth percentile, the majority was not attending college. About 15 per cent of the boys entering military service were planning to attend college afterward. This means that the

TABLE 4. Mental Abilities of the Graduates

		BOYS					
MENTAL ABILITY		CONTINUING			NONCONTINUING		
DECILES	N	College (%)	School (%)	Total (%)	Military (%)	Job (%)	Total (%)
90	1,773	72	5	77	11	12	23
80	1,239	55	7	62	18	20	38
70	1,520	50	6	56	21	23	44
60	1,347	39	10	49	22	29	51
50	1,344	34	11	45	22	33	55
40	1,370	25	9	34	28	38	66
30	1,306	22	8	30	31	39	70
20	1,416	16	10	26	29	45	74
10	1,419	12	9	21	31	48	79
0	1,340	7	10	17	28	55	83
TOTAL (N)		4,830	1,454	6,284	3,878	5,628	9,506
		GIRLS					
	N	(%)	(%)	(%)		(%)	
90	1,630	59	16	75	N	25	
80	1,326	41	22	63	O	37	
70	1,641	39	22	61	N	39	
60	1,450	33	20	53	E	47	
50	1,587	25	23	48		52	
40	1,626	21	22	43		57	
30	1,522	18	24	42		58	
20	1,653	12	19	31		69	
10	1,636	8	20	28		72	
0	1,253	5	23	28		72	
TOTAL (N)		3,987	3,155	7,142		8,365	

percentages shown for college-going underestimate somewhat the number who have definite college plans.

The girls showed important differences from the boys. Fewer girls planned to attend "college" at all mental ability levels. Very few boys were attracted toward schools of other types, but significant numbers of the girls at each level of mental ability were planning to enter nondegree programs of training.

Only in the top levels did a majority of the girls plan to attend a degree-granting college. Fifty per cent of the girls who planned to attend a degree-granting college scored in the top one-fifth of all graduates in mental ability and 24 per cent in the top one-tenth.

Scholastic Achievement

The scholastic achievement of the graduates is reported by the percentile rank in graduating class given by the high school for each of its 1957 graduates. The girls are definitely superior in scholastic achievement. More than twice as many girls as boys ranked in the top 20 per cent of their classes. In fact, 60 per cent of all boys ranked in the lower half.

In addition to the limitations of the use of rank in class created by qualitative differences among high schools, this striking sex difference in scholastic achievement in high school has important meaning for college admissions policies which use class rank in the selection of students.

TABLE 5. Scholastic Achievement of Graduates

			BOYS				
MENTAL ABILITY	CONTINUING				NONCONTINUING		
DECILES	N	College (%)	School (%)	Total (%)	Military (%)	Job (%)	Total (%)
90	973	82	5	87	4	9	13
80	1,101	72	6	78	9	13	22
70	1,163	56	7	63	17	20	37
60	1,268	47	8	55	19	26	45
50	1,480	40	10	50	21	29	50
40	1,530	33	9	42	25	33	58
30	1,716	26	10	36	27	37	64
20	1,841	20	9	29	29	42	71
10	1,888	12	10	22	31	47	78
0	1,982	7	9	16	33	51	84
TOTAL (N)		5,143	1,275	6,418	3,469	5,055	8,524
			GIRLS				
	N	(%)	(%)	(%)	(%)*	(%)	(%)
90	2,176	56	18	74	0	26	26
80	2,065	40	23	63	0	37	37
70	1,951	31	22	53	0	47	47
60	1,827	26	21	47	0	53	53
50	1,676	20	22	42	0	58	58
40	1,535	18	22	40	0	60	60
30	1,358	13	21	34	1	65	66
20	1,194	10	20	30	1	69	70
10	1,109	7	17	24	2	74	76
0	945	4	19	23	2	75	77
TOTAL (N)		4,147	3,253	7,400	120	8,316	8,436

* *Marriage*

Thirty per cent of the boys who planned to attend degree-granting colleges ranked in the top one-fifth of their classes in scholarship, and 15 per cent ranked in the top one-tenth; among girls, 50 per cent in the top one-fifth; 30 per cent in the top one-tenth. Note that in each decile below the seventieth percentile, the majority of graduates was not planning to go to college.

Occupation of Fathers

As shown in Table 6, much larger numbers of the children of fathers (1) who are in professional and executive, sales and office work; or (2) who owned, rented, operated, or managed a small business were planning to attend college than the children of (1) farmers, and (2) "service" and "semi-skilled" workers. The differences among the occupational groups in the proportions of children who were attending "schools" were not as great as for those attending "college"; but among the children of farmers almost as many were electing other types of schools as were electing college. Although the occupations differ widely in the proportions of children who planned to go to college, there were as many "college-going" graduates whose fathers were in "service" or "semi-skilled" occupations as there were whose fathers had "professional or executive" positions; and farmers supplied nearly as many as office workers and salesmen combined.

TABLE 6. **Occupations of the Fathers**

OCCUPATION	CONTINUING				NONCONTINUING
	N	College (%)	School (%)	Total (%)	Total (%)
Professional or Executive	3,525	64	11	75	25
Office or Sales	2,785	46	14	60	40
Skilled	3,555	28	16	44	56
Small Business	3,390	43	17	60	40
Farm	6,170	18	17	35	65
Service or Semi-Skilled	11,146	20	14	34	66
Other	700	30	17	47	53
TOTAL (N)	31,271	30	14	44	56

Education of Parents

The first fact to consider is that 53 per cent of the fathers and 47 per cent of the mothers of the graduates had not graduated from high school. In fact 36 per cent of the fathers and 29 per cent of the mothers had not even attended high school. Only one out of seven mothers or fathers had attended a college. Fewer than 10 per cent of the parents were college graduates. There was little difference between the reported levels of education of the fathers and mothers, the difference being in the direction of more education for the mothers.

In terms of the groupings reported, it is only when the parents had attended college that a majority of the children reported that they planned to go to college. If the parents were high school graduates, a majority of their children planned to continue some form of schooling beyond high school.

Of the boys and girls who planned to go to college, 70 per cent had parents who were high school graduates; 30 per cent who had attended college, and 20 per cent who had college degrees. The greater the amount of schooling the parents had, the more likely their children would plan to go to college. The educational level of the parents had influenced the plans of the children at all levels of mental ability and scholastic achievement of the children.

Since the great majority of parents in the near future will be high school graduates, and many more of them will have attended college, these facts foreshadow large increases in college attendance over and above the increases forecast from increased birth rates.

The "college-going" graduates were divided into three groups of almost equal size:

1. those whose fathers attended college (3,100).
2. those whose fathers graduated from high school but did not attend college (3,152).
3. those whose fathers did not graduate from high school (3,568).

If the education of the parent were less than high school graduation, the majority of graduates were discontinuing education. Of the graduates who were not continuing their schooling, 62 per cent had fathers who had not attended high school; only 8 per cent had fathers who had attended college.

Size of High School

The size of the high school is measured in this report by the number of graduates. Four groups of schools were used: (1) 1-59 graduates, (2) 60-119 graduates, (3) 120-259 graduates, and (4) 260 or more graduates. The number of graduates in each of these groups was approximately equal: (1) 8,669; (2) 7,812; (3) 8,497; (4) 9,173.

The number of graduates who were continuing education beyond high school increased with each increase in high school size. This fact must be interpreted in the light of the occupations and education of the parents. The parents of 39 per cent of the graduates of the smallest schools (1-59 graduates) were farmers. This is the occupational group which had the lowest yield of graduates with "college" plans, 18 per cent; and 50 per cent of the college-going graduates whose fathers were farmers came from schools with fewer than fifty-nine graduates. The fathers of 32 per cent of the graduates of these small schools had not attended high school, compared with 19 per cent for the largest schools (260 or more graduates). Sixteen per cent of the fathers in the smallest schools had attended college, compared with 32 per cent of the fathers in the largest schools. In addition, the location of Wisconsin's colleges makes going to college more accessible to the graduates of large high schools.

Furthermore, the small high schools (1-59) furnished 18 per cent of the graduates who scored in the top 20 per cent of the mental ability tests, compared with 34 per cent who were graduates of the largest schools (260+).

These facts indicate that size of school as an influence upon the decision of the graduates to go to college is not the direct result of size itself. Rather, the characteristics of the graduates and of their parents as individuals are more important.

Economic Ability

Several lines of evidence of the economic ability of the graduates and their parents to finance a college education were gathered.

One of the questions upon economic ability asked was:

> "How do you estimate the ability of your parents to help you go to college, if you desire to go?"

Of those planning to go to "college," 83 per cent reported that their families could afford it, but 17 per cent were planning to go even though they believed their families could not afford it.

Of those getting jobs, 43 per cent reported that their families could not afford to finance a college education. The other 57 per cent planned to get jobs although they believed that their families could afford to finance a college education. Eleven per cent of the latter reported they could easily afford college.

Of all the graduates answering this question, 30 per cent reported that their parents could not afford to finance a college graduation. This fact does not mean, however, that "lack of money" is the reason that these students, or even a substantial share of them, did not plan to attend "college."

Another line of evidence was gathered in the responses to this question:

> "In terms of income or wealth of families in my community, I think my family is: (a) considerably above average, (b) somewhat above average, (c) average, (d) somewhat below average, (e) considerably below average."

The overwhelming part of the graduates considered their families to be equal to or better than average in income. Only 6 per cent reported below average incomes. While "college-going" youth was made up in substantial part (one-third) of those from "above average" income families (in the graduate's opinion), more than one-half of the children of families with "above average" incomes were not going to college. Substantial percentages of those in "below average" families did plan to go to "college." There is little evidence that the graduates' beliefs about the economic status of the family strongly influenced large numbers of the graduates not to attend college.

A third question evoked still another line of evidence. This question was:

> "About how much could you or your family contribute to your college expenses next year (if you were going)?"

If the graduate and his parents could provide more than $500 toward his expenses, the majority of the graduates planned to go to college. Of those going to "college," 70 per cent could provide $500 or more. Of graduates getting jobs, however, 44 per cent also could provide $500 or more but were not attending "college." The fact also remains that 30 per cent of those going to college were planning to do so despite visible resources of less than $500. Of all the graduates reporting, 44 per cent stated that they could provide less than $500 toward college expenses. Twenty-six per cent could provide more than $1,000.

As a further check on ability to finance further education, those who were planning to go to college were asked this question:

> "If you are going to school next year, what part of your school or college expenses do you expect to provide from summer earnings or part-time work at school?"

A majority of the boys and girls who were going to college expected to earn substantial parts of the costs of their education. Thirty-six per cent of the boys expected to provide more than $500 for this year's schooling, while 1 per cent of the girls expected to provide this much. Assuming an average cost of $1,250, 42 per cent of the girls and 18 per cent of the boys must have been expecting to obtain $1,000 from their families, from scholarships, or other resources. These figures are consistent with the total family contributions previously reported.

The graduates were able to make realistic estimates of the cost of going to college away from home. The question was:

> "How much do you think it costs per school year to attend college away from home?"

The responses were consistent with the range of costs in various schools and the number of students expecting to attend the various types of schools. The graduates appear to have given informed answers to this question.

All lines of evidence presented in this section suggest that economic ability is a factor in the decisions of the graduates, and no doubt was a conclusive factor in individual cases, but lack of money was not an overriding reason for very large numbers of the graduates to discontinue their schooling.

Interest in College

It is sometimes assumed that all high school graduates want to go to college. Evidence was found in this study that sizeable numbers of the graduates would not attend college even if they had the money.

The graduates first were asked if they had "ever considered attending college?" Of all the graduates, 76 per cent said "yes"; 24 per cent, "no." Those who said "no" were asked, "Would you have considered attending college if you had the money?" Eighty-three per cent of these students said "no."

Willingness to Borrow

In view of the current interest in developing loan plans to assist students who need financial assistance, the graduates were asked this question:

> "Would you borrow money for college expenses if you could pay it back on the installment plan after leaving college?"

About 30 per cent of the graduates indicated that they would borrow money for their college expenses upon the installment plan. Of those who ranked in the upper 30 per cent of their classes, 40 to 50 per cent would borrow money on this kind of plan. Among those who responded, however, a considerable number of students have no need to borrow, but it can be safely said that many graduates accept the idea of borrowing money to get a college education.

Influence of Parents

Two indications of the influence of the parents upon the plans of the graduates were reported by the graduates.

The first was the response to these questions:

> "To what extent have you discussed your plans with your parents?
> How much did they influence your plans?"

Very few of the graduates who were continuing their schooling reported that parents had no influence upon their plans, and large numbers reported "very much" influence.

Strong influence of parents was reported by almost two-thirds of all the girls who were continuing their schooling. The largest group reporting no influence was boys who were entering military service. This information suggests that parents figure more strongly in the decisions of youth who continue schooling than in the plans of those who do something else.

The graduates were also asked to check the following question:

> "My parents: (a) want me to go to college, (b) do not want me to go, (c) do not care whether I go, (d) will not let me go."

Of all graduates reporting, 54 per cent said that their parents want them to go to college. Approximately 6 per cent reported that their parents either "did not want them to go to college" or "would not let them go." The 16 per cent of the boys planning military service who reported that their parents wanted them to attend college indicated they would attend college after military service.

The majority of all graduates who were getting jobs, getting married, or going into military service reported that their parents "do not care" whether they go to college. This contrasts with the very high percentage of parents of graduates with "school" or "college" plans who want their children to go to college.

These lines of evidence indicate that the plans of college-going youth are strongly influenced by their parents when there is positive encouragement by the parents. Indifference or positive discouragement by parents was overcome or disregarded by comparatively small numbers of the graduates. The majority of the parents of the youth who were not continuing their schooling either did not positively encourage college attendance, or were indifferent toward it (as reported by their children).

Influence of Friends

The graduates were asked to check their answers to the following question:

> "Most of my friends are: (a) going to college, (b) getting jobs, (c) going into military service, (d) other."

As a whole, there was strong support for the adage, "Birds of a feather flock together." Of the college-going graduates 75 per cent reported that their friends were going to college. Of those getting jobs, 71 per cent had friends who were getting jobs. Of those going into military service, 59 per cent had friends going into service.

Influence of School and Teachers

The graduates were asked to report the influence of their teachers or counselors upon their plans in the same way that they did for their parents.

The graduates said that the teachers had considerably less influence upon the plans of the graduates than did the parents. Teachers had more influence upon the plans of the "school" or "college-going" youngsters than they did upon those who had other plans.

The number of graduates who said that their teachers had "no influence" upon their plans outnumbered, by almost four to one, the number who said that their teachers influenced their plans "very much."

Of the graduates whom the teachers did influence "very much," about 42 per cent were planning to go to college. Of those who were not continuing their schooling, about 70 per cent said their teachers had no influence upon them. This evidence should not be taken to mean that individual teachers did not have significant influence upon individual graduates. This information suggests, however, that teachers and counselors in general do not figure as strong influences upon the decisions of the majority of graduates about education beyond high school. Their influence seems weakest among the youth who do not plan to go to college.

The graduates were also asked to answer this question:

> "My teachers in high school have: (a) encouraged me to go to college, (b) discouraged me from going to college, (c) have had no especial influence upon my plans."

Almost half of the graduates reported that their teachers had encouraged them to attend college. Of these, 57 per cent of the boys and 47 per cent of the girls planned to go to college. One out of six of those who said the teachers had discouraged their college attendance were planning to attend, but the numbers in this group were practically negligible – about 2 per cent of all graduates. Again, the graduates who do not continue their schooling reported that teachers have had no special influence upon their plans.

As a further test of a school-related influence upon their plans, the graduates were asked to answer this question:

> "High school studies: (a) have been interesting; I want to learn more, (b) have been uninteresting; I would rather work than study, (c) have had no especial influence upon my plans."

About 60 per cent of the graduates said high school studies were interesting. Nine out of ten who said high school studies were "uninteresting" were not going to continue their schooling beyond high school, but the vote was more than four to one in favor of finding high school studies interesting. About 30 per cent of the graduates, however, said that high school studies had no special influence upon their plans, and three out of four of these were not going to college.

This information suggests that the sheer liking to go to school and the enjoyment of studies are positive stimuli toward continuing education for considerable numbers of students. Most youth who do not find this kind of satisfaction in school work discontinue schooling at high school graduation. Again, large numbers of those who are not planning to go to "college" do not credit their school experiences with much influence upon their plans.

A further test of interest in education beyond high school was found in the answer to this question:

> "Did you take a college preparatory course?"

Preparation for college was not the dominant objective of most of the graduates; 60 per cent answered "no." This finding is consistent with the earlier finding that almost 70 per cent of the graduates did not plan to attend a "college."

One-fourth of the graduates who were planning to go to college, however, said that they had not taken a "college preparatory course." It is not known whether these students have taken subjects which will qualify them for college admission without their being aware of taking a course called college preparatory or whether these students are truly deficient in meeting typical college entrance requirements.

On the other hand, 40 per cent of those who had taken a college preparatory course planned either to attend another type of school, to get jobs, to marry, or to enter military service.

Opinions about the Value of a College Education

At the conclusion of the questionnaire the graduates were asked to read a list of opinions about the value of a college education (see questionnaire in Appendix B) and to check the three opinions which seemed most important to them.

These opinions were developed from (1) studies of opinions frequently expressed by high school graduates; (2) suggestions about possible differentiating value statements found in other studies; and (3) hunches of the present investigator. In general, the statements emphasized three types of value: economic, social, and educational.

Following are the statements in (1) above upon which there were the greatest differences between the "college" and "noncontinuing" groups of boys:

1. These statements received many votes – frequently from the college-going group and infrequently from the noncollege group:

   "I (am) would be greatly dissatisfied to stop at my present level of knowledge."

   "College life broadens you socially and develops your personality."

   "College graduates usually have the leadership positions."

   "A college education helps you live a happier, more complete life."

2. These statements received many votes – frequently from the noncollege group and infrequently from the college-going group:

   "I would rather start earning money quickly and learn on the job."

   "Skilled laborers get paid as much as most college graduates."

These statements in (2) above produced the greatest differences:

1. These statements received relatively few votes – more frequently from the college group than from the noncollege group:

   "College life and activities attract me very much."

   "College studies make you work at a higher intellectual level, and I like that."

2. These statements received relatively few votes – more frequently from the noncollege group than from the college group:

   "Learning on a job is more practical than most school learning."

   "Success in life depends upon ability and effort, not amount of education."

   "Going to college would be a waste of time for me."

   "Going to college costs more than it is worth."

The two groups voted in almost equal proportion on the following statements:

"College graduates get jobs with better pay."

"The country needs more people who have highly developed skills and knowledge."

"Going to college enables you to study more lines of work before deciding on a career."

Few students in either group checked the following statements:

"College is a good place to meet a worthy life mate."

"Persons who do not have college educations often make better leaders."

"Going to college has just been accepted; I have never thought of anything else."

The responses of the girls showed essentially the same pattern. Substantially larger percentages of the college girls than boys checked these statements:

"College life and activities attract me very much."

"A college education helps you live a happier, more complete life."

In summary, the two groups tend to agree upon factual statements regarding the general values of a college education. Regarding statements involving personal plans, however, the noncollege group strongly emphasized immediate, practical, and economic considerations. Whether the opinions expressed were rationalizations of their decisions or whether they reflect the basic motivations of these graduates may be debated. In the perspective of the background factors studied, however, the evidence favors the judgment that the expressed opinions of all of the graduates stem from pervasive attitudes and predispositions.

Analysis of the responses of the graduates to the whole range of the questionnaire supports the conclusion that the overwhelming majority had made realistic plans based upon their abilities, family circumstances, and opportunities; and that they had given considered answers to this inquiry.

DID THE PLANS MATERIALIZE?

The survey of the high school graduates told of their plans beyond high school graduation. The next question was, did the graduates do what they planned to do? Were they telling only their hopes? Did they really know what they were going to do?

In answering the questionnaire, 80 per cent of all the graduates, both boys and girls, said that they were "certain" that they would carry out their plans. It was a part of the plan of this study, however, to determine to what extent the graduates in fact followed the plans they had indicated. This follow-up was done by addressing a questionnaire to a sample of parents. (See working sample, page 9.)

The parents were asked whether their son or daughter was attending a college or school; and if not, to tell the activity in which he or she was engaged. Other questions asked were: whether the parents wanted their son or daughter to attend college; what circumstances prevented their son or daughter from attending college; and what opinions they had about the value of a college education in general.

Questionnaires were mailed to 5,675 parents, the working sample. The number of parents who responded was 48.9 per cent of the "working sample."

Since special interest centered around determining the facts about students with high potential for advanced education or training, special follow-up techniques were used to get more complete returns from the parents of graduates who ranked in the top one-fourth in both mental ability and rank in high school graduating class. Responses were finally received from 97 per cent of the parents of the high potential group.[*]

Stability of the Plans of the Graduates

The answers of the parents to the follow-up inquiry revealed that high percentages of the graduates were doing in the fall of 1957 what they had said was their plan in the spring of 1957. Among the entire responding group, 81 per cent were following their spring plans exactly. Of those who had plans to attend "college," 90 per cent were enrolled in a "college." The graduates who had planned to attend a "school" showed the greatest amount of shift in plans, only 67 per cent actually followed this course. One group reported 100 per cent follow-through in its plans — the girls who planned to marry.

The students who had ranked in the lower one-half of their classes and had reported plans to attend a "college" or school showed a greater shift from their plans than did the students in the upper half. Yet 72 per cent of those with "college" plans in this group were attending "college."

A special study of the top one-fourth group mentioned earlier in this study showed that 93 per cent of this group had followed through with the plans they had reported.

Shifts in the Plans of Graduates

Of the 1,225 graduates who had planned to attend college, 129 did not carry out their plans – they were divided fairly equally between attending a nondegree granting school and getting a job; or (boys) entering military service.

On the other hand, ninety-five graduates, or 7 per cent of those who had not planned to attend "college" actually did so. The result is that the number of graduates who were attending college in fall, 1957, was 97 per cent of the number who indicated "college" plans in spring, 1957.

One out of twelve graduates who did not plan to continue their schooling actually were attending some school in the fall, 60 per cent in a "college." Only one activity had more graduates than planned – military service.

The evidence is convincing that if high school seniors report their plans about further education during the months of April or May under circumstances like those used in this study, the information will provide a reliable forecast of the total enrollment of college freshmen in the state, and the pattern of attendance among the colleges of the state. There was close agreement between the types of colleges (public, private; university, state college) the parents said their children were attending, and the colleges which the graduates said they were planning to attend.

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[*] A detailed study of th[illegible] group was undertaken by Mr. Donald Young, project assistant, now on the faculty of Wisconsin State College, La Crosse. (2)

Attitude of Parents Toward "College-Going"

The replies of the parents also gave information about their desires for the education of their son or daughter and insight into their beliefs about the value of education beyond high school, particularly going to "college." The replies are summarized as answers to specific questions.

1. **Did they want their children to continue their schooling?** Overwhelmingly, yes — 1,832 out of 2,084 parents (88 per cent). A majority cast affirmative votes regardless of what their children were doing. There is reason to believe that some of the graduates interpreted their parents' attitude as one of "don't care," not as "encouragement," even when the parents wanted them to go. Perhaps the parents did not convey their desires positively or perhaps their feelings were not strong, but they did not say that they discouraged college attendance.

2. **What were the circumstances which prevented their children from attending college?** The parents whose children were not continuing their schooling, even though the parents wanted them to continue, reported the reasons listed below.

could not afford it	33%	now attending part-time	6%
did not want to go	25%	marriage	2%
entered military service	15%	has a job	1%
will attend later	13%	other	5%

This information gives evidence that the number of graduates who were attending school or college in fall, 1957, is short of the total number who eventually will attend, or who are continuing their education part-time, while holding jobs. Financial problems and lack of interest in school were the most frequently cited reasons, 58 per cent of all reasons given.

3. **Why did some parents not want their children to continue their schooling?** The emphasis upon financial problems and lack of interest in school was repeated in the answers to this question; but some of the answers revealed an attitude that further education would be a luxury. More than 40 per cent emphasized financial problems. The reasons given are shown below.

costs too much	23%	want him to enter military service	9%
not a strong student	18%	family needs income	5%
want him to get a job	16%	will be married	3%
need him to work at home	13%	further education is a luxury	2%
he is not interested	9%	no reason given	2%

4. **Did they advise their children to take college preparatory courses?** Although 88 per cent of the parents wanted their children to continue their schooling, only 59 per cent advised their children to take a college preparatory course. This percentage climbed to 75 per cent, however, if the children had ranked in the top one-half of their class. Again, this finding suggests that some parents would do well to exert earlier and more positive influence upon the educational plans of their children if they strongly desire them to continue their schooling beyond high school.

5. **What do parents think about the value of a college education?** The parents were asked to check from a series of opinions about the value of a college education those statements which most closely expressed their own opinions.

The parents of all graduates gave a strong affirmative vote to the following statements:

> A college education is worth making the financial sacrifice it requires.
> A college education is required to get jobs and advance in them.
> Too many capable young people who desire to go to college are not able to go.

Among the parents of "college-going" youth, the following statement received more votes than did the last statement above.

> People with a college education live more interesting and satisfying lives than those without a college education.

These statements drew less than 1 per cent of the total vote. Of those who did vote for these statements, 83 per cent of the votes of parents of children who were attending a school other than a degree-granting college went to the following statements:

> Going to school costs more than it is worth.
> The school of hard knocks is more valuable than a college education.

The total vote on the following three statements reflects the opinions of the parents upon the question of whether too many young people are going to college.

> Too many capable young people who desire to go to college are not able to go.
> Too many people are going to college.
> Going to college is not worthwhile for many young people who go.

The last two statements above were sometimes expressed by college-going persons who believed in restricted admission to colleges; but the total support for these ideas was negligible. The strongest support of these opinions came from those whose children are attending a "school," not a "college." The parents who reply to an inquiry of this kind, however, probably differ from those who do not. Since two out of three parents whose youngsters were planning to get jobs did not reply, it would not be a safe generalization that they are fundamentally more like the parents of "college-going" than "school-going" children. A more likely interpretation is that about a third of the parents of "job-getting" children have attitudes or opinions more like the "college-going" than like the "school-going" parents.

This group of parents also gave strong support to the following statements.

It is better to learn a job skill or trade than go to college.

Success in life depends upon ability and effort, not amount of education.

You do not need a college education to earn good money and be leaders in your community.

People who learn on the job, use libraries, and teach themselves are as well-educated as those who go to colleges.

The following statement also received strong support from the parents of the "college-going" youth.

Persons who do not have a college education are at a social disadvantage in life.

There were no important differences between the responses of parents of girls and boys.

In summary, the great majority of parents place a high value upon a college education, believe that more capable children should have the chance to attend, that it is worth making a financial sacrifice to provide it, and that a college education is becoming a social and economic necessity for their children. The parents of children who are not continuing their schooling vote in a pattern more like that of the parents of the "college-going" group than like that of the "school-going" group. The parents of the "school-going" group emphasized much more frequently the values of learning a trade or skill, hard work, self-education, and more frequently question the worthwhileness of a college education. Finally, practically all of the parents want their children to continue their schooling beyond high school. The parents differ on the question of what kind of schooling is best, but the great majority support going to "college." Those who do not are the parents of youth who are going to trade, business, vocational, nursing, beauty culture, and other types of schools which have specific occupational training.

PLANS OF THE ACADEMICALLY TALENTED STUDENTS

Previous studies of human talent and achievement have established that students who rank in the top one-fourth in intelligence and scholastic achievement are, with individual exceptions, the pool which yields the persons who achieve with distinction in college studies and who make most of the important contributions to the advancement of society in adult life. To the extent that this group is not developed to its full potential in education and training, society is the loser. It is important, therefore, to know the facts about this pool of academically talented students.

Two approaches to the definition of persons who have "high potential" were used:

1. those who ranked in the top one-fourth of their classes both in scholastic achievement and in tests of mental ability.

2. those who were identified by their teachers or counselors as having demonstrated unusual achievement and promise in socially useful directions.

The first of these approaches uses a combination of the measures commonly used by college admissions officers for selecting college students. This approach has a high degree of objectivity. The second approach emphasizes the subjective judgment of teachers and counselors. This approach was based on the idea: (1) that there are youths who have unusual ability or talent in socially useful directions who do not rank in the top one-fourth in their high school classes, or in the top one-fourth in mental ability tests; (2) that teachers and counselors often know who these youths are; and (3) that these youths should be included in any census of youth of "high potential." Each of these approaches has specific limitations, and neither is here proposed as a scheme for identifying genius or creative talent.

This part of the study deals with the findings about these two "pools" of graduates with high scholastic promise. The data are reported only in terms of whether these groups of graduates were planning to go to "college." If the graduates had other plans, it is considered to be a loss in human potential. This assumption should not be construed as a belief that persons who enter noncollege programs, or discontinue their schooling, do not or cannot make important contributions to society. The idea is that the rapidly increasing needs for persons with high levels of knowledge, understanding, and skill make regrettable any losses from the "pool" of promising high school graduates.

Characteristics of the Top One-fourth

The top one-fourth in scholastic achievement included two girls for every boy. There were 800 girls but only 424 boys. On the other hand, the numbers of boys and girls who scored in the top one-fourth on the mental ability test were practically equal.

This situation prompted the decision to define the student of "high scholastic promise" as one who had scored in the top one-fourth in both class rank and on the mental ability test. When this definition was used, 408 girls and 276 boys qualified.

Among all graduates, 12 per cent of all the boys qualified for the top one-fourth and 16 per cent of the girls.

The characteristics of these high potential youth are described in terms of how they answered certain questions about their plans, their parents, their friends, their school experiences, and their opinions about the value of a college education.

TABLE 7. Characteristics of Graduates With High Scholastic Promise and Percentage Going to College

	TOP ¼		ALL	
	(%)	(%)	(%)	(%)
PLANS (Boys and Girls)				
How many were going to "college"?	72	—	31	—
PARENTS (Boys)				
What was the occupation of the fathers?				
professional and executive	26	(85)*	11	(66)*
sales and office	14	(79)	10	(51)
small business	7	(79)	12	(52)
skilled	7	(83)	10	(33)
service and semi-skilled	27	(64)	37	(25)
farm	19	(55)	18	(20)
How much schooling did the fathers have?				
did not attend high school	24	(65)	37	(23)
high school graduate, did not attend college	34	(59)	26	(29)
attended college	29	(75)	14	(66)
college graduate	18	(89)	9	(71)
Did parents encourage college-going?	95	(80)	48	(55)
SCHOOL (Boys)				
How many attend a small school? (1-59)**	22	—	26	—
How many attend a large school? (260+)**	27	—	26	—
Were high school studies interesting?	93	(79)	54	(54)
Did teachers encourage college-going?	80	(61)	46	(47)
Did they apply for admission to college?	80	—	48	—
FRIENDS (Boys)				
Were their friends attending college?	72	(86)	40	(67)
ECONOMIC ABILITY (Boys)				
Can they contribute more than $1,000 to college expenses?	37	(82)	26	(50)
Can they contribute less than $500 to college expenses?	26	(59)	42	(32)
Would they borrow for college expenses?	66	(95)	18	(60)
How many had never considered going to college?	5	—	26	—
How many of those who never considered going to college would have if they had the money?	20	—	18	—
How many applied for a scholarship?	46	—	13	—
How many took the National Merit Scholarship Examination?	58	—	15	—
How many took College Entrance Board Examinations?	12	—	8	—
Were they identified as "outstanding"?	51	(86)	11	—

**The numbers in parentheses refer to the percentages of this group who had plans to go to college.*
***The percentages for these items were based only upon rank in class.*

This information shows that if the graduates have high scholastic promise, a majority of them plan to go to "college" regardless of the occupation, or the amount of schooling of the parent. High ability and achievement in high school bring pronounced increases in the number of graduates going to college, regardless of any parental characteristic.

There is evidence that the level of education of the parents may have greater influence upon the plans of the graduates than the occupation of the parents. The evidence takes this form.

The occupation which yielded the smallest percentage of "college-going" graduates was "farm," 20 per cent. The occupation with the highest yield was "professional and executive," 66 per cent. Few fathers who were farmers had attended "college," while few fathers in the "professional and executive group" had not attended college. An exploratory study was made to determine whether within these occupations the plans of the graduates fluctuated with the amount of schooling of the parents.

It was found that while "college-going" is the stronger habit among the boys of "professional and executive" fathers at each level of parental education, the "farm" boys go to "college" in much larger numbers if their fathers have been high school graduates or have attended college. On the other hand, the percentage of "college-going" sons dropped significantly when the father had not attended college.

The influence of the education of the parents was evidenced in still another way. It was observed that the percentage of "college-going" increases in terms of the combined education of the two parents.

The influence of college attendance by either parent appears to be strong, and stronger when both have attended college. The influence of the educational level of the parents upon plans for "college-going" extends to all their children whatever their score on mental ability tests or scholastic achievement in high school.

When both parents have attended college, a larger percentage of the children who ranked in the lower one-half of their classes plans to attend college than of the children who ranked in the top one-fourth of their classes when neither parent attended college. This situation is also present when rank on mental ability test is used for comparison. Of the graduates who ranked in the top one-fourth, but neither parent had attended college, 44 per cent were planning to go to college; of those in the lower one-half and both parents had attended college, 47 per cent were planning to go to college.

Opinions About the Value of a College Education

A study of the opinions of this group about the value of a college education was made to discover whether there were important differences between (1) those who were planning to go to college; and (2) those who were not planning to go to college.

Below are the statements upon which there were significant differences.

Boys

The "college" group checked these statements more frequently than the "noncollege" group.

I am (would be) greatly dissatisfied to stop at my present level of knowledge.

Going to college has just been accepted; I have never thought of anything else.

The "noncollege" group checked these statements more frequently.

I would rather start earning money quickly, and learn on the job.
Skilled laborers get paid as much as college graduates.
Learning on the job is more practical than most school learning.
Success in life depends upon ability and effort, not amount of education.

Girls

These additional items were checked by "college-going" girls.

College is a good place to meet a worthy life mate.
A college education helps you live a happier, more complete life.
College life broadens you socially, and develops your personality.

"Noncollege" girls checked these more frequently.

Going to college would be a waste of time for me.
College graduates usually have the leadership positions.

Both groups substantially agreed, boys and girls, that

College graduates get jobs with better pay.
The country needs more people who have highly developed skills and knowledge.

A further fact is that of all the votes for the statements listed below, the following percentages came from students who had ranked in the lower one-half of their classes in scholastic achievement.

I would rather start earning money quickly.	80%
College is a good place to meet a worthy life mate.	88%
Skilled laborers get paid as much as college graduates.	76%
Learning on the job is more practical.	84%
Success in life depends upon ability and effort.	81%
Going to college would be a waste of time for me.	84%

The influence of immediate, practical, and economic incentives pervades the attitudes of all "high potential" men graduates regardless of their plans about further education. The girls show greater emphasis upon social rather than economic factors. Cultural or purely intellectual incentives are less strong but there was less opportunity for such influences to be expressed. The opinions to be checked by the students did not emphasize these values, although they were not neglected.

Characteristics of the Top One-fourth Graduates Who Did Not Go to College

Since almost four out of five of the graduates who had high scholastic promise were planning to go to "college," it became important to search for clues to the reasons that the other 20 per cent were not also planning to go to "college." A comparison was made of the background characteristics of the "college" part of the "continuing" group in the top one-fourth with the "job" part of the "noncontinuing" group. These differences among the two groups of boys are noteworthy.

Comparison of High Ability Graduates (1) Who Were Continuing to College; (2) Who Were Not Continuing to College (Boys)

CHARACTERISTIC	CONTINUING	NOT CONTINUING
1. Occupation of parent	Much larger percentage (comparatively) in professional, executive, sales, and office work	Much larger percentage (comparatively) farmers or in service or semi-skilled work
2. Education of parent	30% had attended college	None had attended college
3. Size of high school	Predominantly large urban schools	Predominantly small rural schools
4. Interest in studies	93% enjoyed high school studies	70% enjoyed high school studies
5. Friends	85% of friends going to college	23% of friends going to college
6. Family contribution to college expenses	Less than $500, 37% More than $1,000, 69%	Less than $500, 59% More than $1,000, 13%
7. Willingness to borrow money for college expenses	(Yes) 66%	(No) 76%
8. Considered attending college	100%	91%
9. Applied for a scholarship	43%	13%
10. Identified by their teachers as outstanding	54%	40%
11. Occupational aspirations	Professional and executive positions	Executive, management, and skilled trades

In summary, the typical top-ranking youth who was planning to go to college came from a home in which the father was at least a high school graduate. The father may have been employed in any one of the major occupations. The family income was at least average among the families of the community, and the family was able to contribute more than $500 toward college expenses. The youth had applied for a scholarship and would borrow money for college expenses, if necessary. He may have graduated from a high school of any size, but, whatever the school, he had found his high school studies interesting. His parents had strongly encouraged his going to college, and his teachers had identified him as having unusual promise in some special field. His friends were going to college. He had taken a college preparatory course which had included studies in mathematics, science, and foreign languages. He aspired to professional or executive positions in the occupational world. He wanted to increase his knowledge and skills and had never thought that he would not go to college.

The typical top-ranking youth who was not planning to attend college came from a home in which the father was a farmer or semi-skilled worker who had never attended college. His family had average or below average income and could contribute less than $500 toward his college expenses. The youth believed that his parents could not afford to send him to school. He was attending a small school. He was less interested in school studies than his college-going classmates of equal ability and his parents were less interested in his going to college. Most of his friends were, like him, getting jobs. He did not want to borrow money for college expenses even if he could pay it back on the installment plan. In fact, there is some doubt that he would go to college even if he could afford it. He had not applied for a scholarship. He had not been identified by his teachers as a student who had shown unusual achievement or promise in a specific field. He hoped some day to be an executive or skilled worker. He believed that success depended upon ability plus hard work and he wanted to go to work and start earning money quickly.

Specially Identified Graduates

The teachers and counselors of the high schools identified about one in ten of their graduates as having shown outstanding promise in some special field. The fields in which these students were reported to have shown unusual achievement were many. Included were most of the subject-matter fields of the high schools, and a number of activities such as nursing, teaching, business management, athletics, and general leadership.

One of the purposes of this part of the study was to discover whether teachers had identified youngsters who showed some special talent or promising achievement but who did not have unusually high general scholarship. An analysis of the graduates whom the teachers identified showed that about one out of five had not ranked in the top one-fourth of their classes either in scholastic achievement or on the mental ability test. Fields of excellence most frequently named by teachers for this 20 per cent were: Art, 10 per cent; Music, 12 per cent; Science, 10 per cent; Technical Skills, 12 per cent; Athletics, 13 per cent; Agriculture, 7 per cent; Business Skills, 6 per cent.

Science was the special field in which all these students were most frequently identified. Other fields, in order, were: mathematics, business skills, English, music, technical skills, leadership, athletics, art, agriculture, home economics, foreign languages, nursing, social studies, teaching, and social service. About one out of eight were named simply for high academic ability.

Of the students mentioned for excellence in science, one out of five were students who had not qualified as students of high scholastic promise. In general, however, when the fields of excellence were in the basic subjects (English, mathematics, science, social studies, and foreign languages), the great majority of students had very high general scholarship. Of the number of identifications in this field, 78 per cent belonged to such students.

It must be remembered that the identification of these students was in some measure a matter of chance – depending upon the teacher or teachers who named these youth. It is not reasonable to suppose that the procedure used in this study could identify all of the youth who have unusual promise, nor that the ones identified are youth who are unquestionably outstanding. Nevertheless, there is reason to believe from general knowledge of the nature of special abilities, in addition to the evidence presented here, that an important, though small, reservoir of undeveloped human talent, skills, and ability does exist among graduates who are not identified by use of measures of scholastic aptitude and general scholarship.

CONCLUSIONS AND IMPLICATIONS

1. High school graduation is fast becoming just a whistle station on the educational journey of the majority of Wisconsin's youth. There is a strong and persistent move toward training and education beyond high school. This trend is fed by the increasing technical demands of work, the specialized training programs of the armed services, and the increasing level of general education of the parents.

2. The drive toward more education has strong occupational and utilitarian motives. Going to college as a means to improve socio-economic status still dominates the purposes of most college-going youth and their parents. Children of parents who have attended college more frequently emphasize values of the personal satisfactions and enjoyment which come from knowledge itself.

3. An important factor producing increased enrollments in schools and colleges beyond high school is the increasing level of education of parents. Only one-half of the parents in this study were high school graduates. This proportion will be increasing rapidly and more will have attended college. Very few children of parents who have attended college do not also plan to attend college. This fact needs consideration in estimating future college enrollments. It is an inflationary trend sometimes overlooked because of preoccupation with enrollment growth caused by the rapid increases in the birth rate.

4. In general, the majority of college-going students in Wisconsin are boys and girls who have excelled two-thirds of their classmates in scholastic aptitude and achievement. The great majority of students who did not find high school studies interesting do not want to continue studies at an advanced level. Some of those who have not enjoyed high school studies, but who do continue are sons and daughters of parents who have attended college, or who very much want their children to have social and economic advantages which they believe going to college will bring.

5. Almost four out of five boys of high scholastic promise in Wisconsin go to college immediately after high school. Others will join them later, after military service, or after earning money to help pay their way.

6. Lack of money is the major deterrent expressed by one-third to one-half of the high ability graduates not going to college, and their parents. Many

of the others did not have great desire for more schooling – at least of the college type. The data suggest that programs of financial assistance do not have to be massive in scope or amount to be effective in attracting capable youth to college.

7. There is evidence that sizeable numbers of capable youth who want to go to college would take advantage of a loan plan which would permit them to borrow for their educational expenses and pay back on an installment plan after graduation.

8. Counselling and information programs directed at identifying, encouraging, and enabling promising youth to continue their schooling will need to reach parents as well as the youth. This is a program which needs to be the concern of local communities and not left to approaches which colleges and universities alone can make. The major objective should be that able youth do not, because of lack of information, proper counsel, or encouragement, undervalue their worth, and close the doors to a greater future for themselves and for society.

9. More attention should be directed toward youth who have special talents, skills, or promise in fields which do not always come to the attention of teachers. Teachers typically know more about colleges than they do about the whole occupational world. They identify and best encourage those who have interest and aptitude in learning from books. Sometimes the clues to the driving force and ability of youth are off-stage from the school — in a shop, with his hobby, on a part-time job, or in some activity of the community. It is possible that when persons have the basic scholastic aptitude and interest of the average college graduate, other personal characteristics become more significant than increased levels of measured intelligence, or higher scholarship averages.

10. A survey of high school graduates in April and May to learn their plans about attending college furnishes a usable forecast of college enrollments in the state and their distribution among the state's colleges.

This phase of the study has opened the way to two follow-up studies addressed to the following questions.

1. Why do communities and schools differ so greatly in their yield of college-going graduates?

2. Did the high-ranking high school graduates who went to college continue their high scholastic achievement in college? Did many drop out of college?

The following parts of this report furnish answers to these questions.

COMMUNITY AND SCHOOL DIFFERENCES IN COLLEGE ATTENDANCE

J. Kenneth Little and Robert H. A. Fenske

Wisconsin high schools differ markedly in the proportion of their graduates who go to college. Wide differences exist between regions of the state, between schools in communities within the same region, and between schools within the same community. This study attempts to discover the circumstances which bring about these school and community differences.

For simplicity in reporting, the term "yield" will be used to refer to the percentage of high school graduates who planned to attend a degree-granting college. First, the variation in yield among Wisconsin's high schools will be shown according to geographical regions of the state. This will be followed by more detailed analysis and comparison of counties, communities, and schools within communities. Special attention will be given to the following background characteristics:

1. level of income.
2. educational level of adult population.
3. scholastic aptitude, achievement, and aspirations of the high school graduates.
4. occupation and educational attainment of the parents of the graduates.
5. nearness to college opportunities.
6. differences in preference for private or public college.

Regional Differences

1. **Yield.** The yield by counties in each of six geographical regions of the state is shown in Table 8. Map A (Appendix A) shows these regions, the yield from each county in the region, and the location of all college opportunities within each region. The regions have been drawn arbitrarily, but it is believed that each is reasonably homogeneous in characteristics needed for this comparison. Each has at least one four-year public college.

Inspection of Table 8 and Map A shows that Region VI, the major metropolitan area of the state, had a much higher yield than any other region. Each of its counties had a yield above the state median. The smaller yields in the other five regions were *much more alike. In Region I, however, the* yields of half of the counties were above the state median. Note, however, that within each region, except Region I, the range of yields of the counties was much greater than the range of the medians of the six regions.

Since the regions differ markedly in population, it would be expected that the number and size of the high schools in the regions would vary. Table 9 shows the number and percentage of high schools of different sizes in each region. Despite differences in the number of high schools in each size group, the number of 1957 graduates from each was about the same. Note that about 61 per cent of Wisconsin's high schools had fewer than 60 graduates; and that Region VI had 75 per cent of all high schools which have 260 or more graduates, and about 40 per cent of the high schools which had more than 119 graduates.

TABLE 8. Differences in Yield of College-Going High School Graduates by Regions (Fall, 1957)

YIELD	COUNTIES IN EACH REGION						STATE TOTAL
	I	II	III	IV	V	VI	
42-3			1	1			2
40-1							0
38-9	1					2	3
36-7						2	2
34-5	1	1		2	1	1	6
32-3	1	3		1	1		6
30-1	1	1	1	3	2	1	9
28-9		2				1	3
26-7	1	2	3	3	1		10
24-5		3	3	2			8
22-3	1	2	4	2			9
20-1		1	2	2	3		8
18-19	1	1			1		3
16-17			1				1
NUMBER	7	16*	15	16	9	7	70
MEDIAN	30.5	26.5	24.6	27.3	26.5	36.0	27.2

**Crawford county not tabulated, data not representative.*

TABLE 9. Number and Percentage of High Schools of Different Size by Regions

SIZE OF SCHOOL No. of Graduates	REGION													
	I		II		III		IV		V		VI		TOTAL	
	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)
I 0-59	22	81	64	71	50	68	84	75	31	50	22	29	273	61
II 60-119	4	15	19	21	14	19	15	13	15	24	25	32	92	21
III 120-259	0	0	6	7	8	10	9	8	10	16	18	23	51	11
IV 260+	1	4	1	1	2	3	4	4	6	10	12	16	26	7
TOTAL	27		90		74		112		62		77		442	

Earlier studies established that the yield increased with the size of the school. A test was made to learn whether differences in yield would be found among schools of the same size, located in different regions. Table 10 shows these facts. In general, schools of the same size tended to have similar yields regardless of region. Region III, however, had lower yields in each size group, and Region I had somewhat higher yields.

The very wide differences in yield among counties within the regions, as well as the differences between Region VI and the other regions, need further explanation.

TABLE 10. Yields of Schools of Similar Size by Regions

SIZE OF SCHOOL	REGION						
	I	II	III	IV	V	VI	TOTAL
	*Y (%)	Y (%)	Y (%)	Y (%)	Y (%)	Y (%)	(%)
I 0-59	28	21.5	19.5	25	20	37.5	23.25
II 60-119	34.5	28	22	31	24	30.5	29.25
III 120-259	0	30.5	30.5	32.5	34.5	35	31.50
IV 260+	40	36	36	36.5	35	35	35.50

**Y* = *Median percentage of college-going graduates.*

2. **Level of Income.** The regions were known to differ in economic background. To measure differences in economic status, the dollar income per household as estimated in *Sales Management* (May, 1959) was used.(3) Table 11 shows the similarities and differences in income among the regions on this measure. Map B (Appendix A) shows the counties having the highest, middle, and lowest incomes in the state. In general, the income level increased on a line that runs from the north to the south, and west to east, the same direction in which the population has been converging. Regions V and VI had markedly higher income levels than all other regions. All counties in Region VI had income levels higher than the state median. In fact, all but one ranked in the highest fourth. The incomes in Regions I, II, and III were lower than the state median. Region IV represented a middle income group. As seen in the data on yield (Table 8 and Map A), there were wide differences in income among counties of the same region. Within each region, however, the population shift toward the largest cities or communities of an area, and within counties toward the biggest town, was observed in the population statistics. When these communities also had a college opportunity, the income level and yield increased.

TABLE 11. Income Per Household by Regions (1958)

	I	II	III	IV	V	VI	STATE
MEDIAN*	$4,222	$4,478	$4,459	$4,793	$5,652	$6,191	$4,780
RANGE	$3,775-5,316	$4,051-5,792	$3,895-5,599	$3,811-6,904	$4,[illegible]-5,913	$5,297-6,749	$3,775-6,904

**Median of counties within region.*

So far the study had developed that college-going was most prevalent where most of the people are; that most of the colleges were where most of the people are; and that the people where the colleges are had more money to go to college. These facts were elementary and obvious to those who looked. There were still important differences in yield among sections, counties, and communities of the state which did not allow this simple explanation.

Why, for example, did some counties with high income levels have yields which were much below the state median? Why did some counties with low income levels have yields which were much higher than the state median?

TABLE 12. **Relationship of Yield of College-Going Graduates to Income Per Household by Counties**

YIELD (%)	$3,500-3,999	$4,000-4,499	$4,500-4,999	$5,000-5,499	$5,500-5,999	$6,000-6,499	$6,500-6,999
42-3		1					1
40-1							
38-9				1		1	1
36-7				1		1	
34-5	1			2	2		1
32-3		3			2	1	
30-1	1	1	3		2	2	
28-9		1		1	1		
26-7	2	3	2	2	1		
24-5		2	5		1		
22-3		5	2	2			
20-1		2	5		1		
18-19	1		1	1			
16-17		1					
MEDIAN	27	25.5	24.4	27.5	31.2	32.5	38.5

Table 12 shows a scattergram which plots the yields of all counties with the income level of those counties. The curious finding here is that among counties which have an income level below the state median the relationship was slightly negative. Note also the counties which had high incomes but low yields (lower right hand corner) and those with low incomes but high yields (upper left hand corner). Map C (Appendix A) identifies these counties and shows their yields.

Each of the high income-low yield counties, except Calumet, has a college or college opportunity. Manitowoc has a University Extension Center and county teachers' college; Outagamie has a private college and a county teachers' college with University Extension Centers and a state college in an adjacent county. Portage county has a state college. Marathon county has a University Extension Center; Sauk county has a county teachers' college, and is adjacent to Dane county which has the University. The low yield in Calumet county, a county much more rural than its neighbors, was consistent with the low yield in its neighboring rural counties.

In contrast, none of the low income-high yield counties has a four-year college, public or private; none has a University Extension Center; Barron, Polk, Buffalo, and Vernon have county teachers' colleges. Moreover, the yield in three of the four counties which have no college opportunities (Bayfield, Florence, Washburn) was higher than in those which have county teachers' colleges. The very high yield in Florence county (equal to the highest in the state) probably arose from the fact that there is only one high school in the county, with only thirty-one graduates. Its percentage yield may fluctuate considerably from year to year. This school, however, is accredited by the North Central Association of Secondary Schools and Colleges, and while the 1957 yield was higher than its average for the previous years, the school had been producing a higher average yield than schools in neighboring counties. Without the presence of the county teachers' colleges, the yields in Buffalo and Vernon county would drop to slightly below the state median, from 31 to 26 per cent, and from 28 to 25 per cent, respectively. The reduced yields are still higher, however, than those found in the high income-low yield schools.

3. **Nearness to College Opportunity.** These findings raise questions about the common assumption that favorable income levels and nearness to college opportunities produce high college attendance. Further evidence was sought by studying the yields of counties in which college opportunities are located in comparison with counties having no such opportunities.

Table 13 shows the distribution of yields from counties in which various types of college opportunities are present and compares it with counties in which there are no college opportunities.

TABLE 13. Relationship of Yield to College Opportunity

YIELD	PUBLIC ONLY	PRIVATE ONLY	BOTH PUBLIC AND PRIVATE	NO COLLEGES
42-3			1	1
40-1				
38-9	1	1	1	
36-7	2			
34-5	1	2	2	1
32-3	4	1		1
30-1	3		3	3
28-9	1			2
26-7	3	1	1	5
24-5	5			4
22-3	5			4
20-1	2		1	5
18-19				3
16-17				1
NUMBER	27	5	9	30*
MEDIAN	26.3	34.5	31.0	24.5

**Crawford county not tabulated.*

A surface interpretation might suggest that in general the presence of a public college in a county increases the yield somewhat; the presence of a private college increases it greatly; and that if a private college is present *the addition of a public college brings no additional yield,* or vice-versa. This would be a faulty conclusion. Consideration must be given to the location of the several types of schools and the income levels of the counties and cities in which the schools are located.

Map D (Appendix A) shows the location of the counties in which private and public schools are located, the number of each in the county, and the average-income levels of these counties. Note that with few exceptions, the private colleges are located in urban communities, and the majority of them in counties which have above-average incomes. (Median income = $4,750.)

Three of the state colleges and all twenty-two county teachers' colleges are located in nonurban or rural areas of the state, many of them with lower than average income levels. As shown in Table 10 the yield from the small schools, predominantly rural, was consistently lower than average. Twenty-four of the state's degree-granting colleges of all types, six liberal arts colleges, and two major universities are located in Region VI. This region also has thirty of the state's large high schools (260 graduates or more) and had a much higher than average income level. Both of these facts are associated with higher yields (see Tables 9 and 11).

Since the effect of the presence of a college upon college-going by youth in the immediate community was not known, and since only 7 of the 30 four-year colleges in the state were located in the cities of less than 20,000 population, a study was made of the yields of 48 cities in the state. The populations of these cities ranged from 5,000 to 765,000. Estimates of the income per household in each of these cities also were available.

Table 14 shows the scattergram of the relationship of income level to yield in these cities. The effect of unusually high income levels is most pronounced in the three cities in the extreme upper right hand corner of the scattergram. These are suburban and residential cities near Milwaukee (Whitefish Bay, Wauwatosa, Shorewood). The two communities in the extreme lower left hand corner (low income-low yield) are found in less populated and less economically favored northern sections of the state. Orly one of them has a college opportunity and that is a University Extension Center.

TABLE 14. Relationship of Yield to Income Per Household in Forty-Eight Wisconsin Cities

YIELD	4000 4499	4500 4999	5000 5499	5500 5999	6000 6499	6500 6999	7000 7499	7500 7999	8000 8499	8500 8999	9000 9499	9500 9999	10000 10499	TOTAL
76-78													1	1
73-75														
70-72														
67-69														
64-66														
61-63														1
58-60											1			1
55-57														
52-54														
49-51									1					1
46-48														
43-45				2										2
40-42			1											1
37-39	1				5									6
34-36		1		3	1	2								7
31-33			3	1	1	1								6
28-30				1	1	2								4
25-27		1	2	3	3									9
22-24	1	3	1	1	1	1								8
19-21														
16-18			1											1
NUMBER	2	5	8	11	12	6			1		1	1	1	48

There is no strong relationship between income level and yield in the mean level which ranges from $5,000 to $7,000 per household.

Among those which had income levels above the average of the forty-eight cities but which had yields much lower than the median of this group were Stevens Point in Portage county and Wisconsin Rapids in adjoining Wood county. The others are industrial suburbs of Milwaukee (Cudahy, South Milwaukee, West Allis). Those with high yields despite lower than average income level were Ashland (Ashland county), Oconomowoc (Waukesha county), and Richland Center (Richland county). Ashland has a small private college; Oconomowoc is becoming suburban to Milwaukee; and Richland Center is in the heart of a rural area in southwest Wisconsin.

The differences between yields of cities, however, can be matched by differences in yield between schools within the same city or metropolitan area. The range in yield of schools within metropolitan areas is illustrated by Table 15.

TABLE 15. Distribution of Yield of College-Going Graduates Among Public High Schools in Same Urban Areas

YIELD	METROPOLITAN AREA	
	MADISON (AND SUBURBS)	MILWAUKEE (AND SUBURBS)
76	1	1
72	1	
68		
64		
60		1
56		3
52		
48		
44		
40		
36	2	1
32		4
28	1	3
24	1	1
20		5
16		1
12		1
MEDIAN	36.5	32.5

Madison has a private college and the state University. Milwaukee has Marquette University plus the University of Wisconsin–Milwaukee, and a complex of thirteen other liberal arts colleges, technical schools, junior colleges, and seminaries. While the economic status of the homes of the graduates in the same communities definitely varies from school to school, the differences are not so large as to impede large numbers of students from attending college, since it would be possible for them to live at home. At least the cost factor does not seem to be a complete explanation of the extraordinary variation in yield among the schools.

Similar differences were found in all other communities having more than one high school. The range of differences between schools in these cities was usually wide, but not always so great as in Madison and Milwaukee. At this point it was clear that while the yield by counties or cities bore some positive relationship to their being urban or rural, or having high income levels instead of low income levels, these facts did not obtain a full or satisfactory explanation of the observed differences between county and city yields, or between schools within counties or cities.

The question was, in what other ways do high yield schools differ from low yield schools?

4. **Educational Level.** High yields of college-going graduates are known to be associated with the level of educational attainment of parents. The United States Census (1950) provided information about the number of years of schooling of the population twenty-five years of age and older. These data were tabulated and correlated wtih income levels and yield of college-going graduates by counties. Table 16 shows the level of education in each of the regions. Again, Region VI stood out from other regions, the lowest county being equal to the median of Regions I, II, and III.

TABLE 16. Number of Years of Schooling, Twenty-Five Years of Age and Older, by Regions

	I	II	III	IV	V	VI	STATE
MEDIAN*	8.7	8.7	8.7	8.8	8.8	9.2	8.7
RANGE	8.5-8.9	8.5-9.4	8.3-9.2	8.5-12.1	8.4-9.3	8.7-10.2	8.3-12.1

**Median of counties within region.*

Map E (Appendix A) shows the counties which ranked in approximately the highest fourth in education, those in the middle half, and those in the lowest fourth in number of years of education of Wisconsin's population (twenty-five years of age and older). When compared with Map A (showing the yield of college-going graduates), the relationship of high education level to high yield is quickly seen.

Tables 16A and 16B set forth the facts shown in Maps A, C, and E (combined).

In both the high and low yield counties, there is greater correspondence between yield and educational level than between yield and income level. Three of the five counties with high educational levels had higher yields than the state median, although not ranking in the highest group (approximately top fourth) in yield. . . . Ashland, Oneida, and Vilas. The figure for Grant county, which has a state college, was spuriously low, since Platteville, the home of the college and the county's largest community (population 5,751), did not participate in the high school study. Five of the eight counties which had high income levels also had yields above the state median (Brown, Green, Ozaukee, Sheboygan, and Washington). One county (Portage) was defiinitely below the state median. These facts gave the first clue to the reason why Oneida and Vilas counties, in the heart of the north woods of Wisconsin, showed higher yields than most of their neighboring counties. These are counties which have had considerable development as summer vacation resort and hunting areas. This shows up in the extent to which they are becoming urbanized. In 1950, census figures showed the population in Oneida county to be 42.5 per cent urban. Vilas county was and is rural. Nevertheless, the nature of the population in these counties has been changing and their characteristics, including educational level, are different from other counties in that area.

The data also show that two of the four counties which were in the lowest group in both educational level and income had higher yields than the state median (Buffalo and Vernon). Burnett county's yield was at the state median and reached the yield of Portage county which was in the highest income group, and equaled the yields of Outagamie and Wood counties. Still more striking are the five counties in the lowest income group which were also in the group with the highest yields (Barron, Bayfield, Florence, Polk, and Washburn).

Because of these observations, correlation coefficients were calculated between the three variables of yield, income, and education. The correlation coefficients (rho) were:

between yield and income = .53.
between yield and educational level = .71.
between income and educational level = .61.

TABLE 16A. Counties With (A) Highest Yields; (B) Highest Educational Level of Adult Population; (C) Highest Income Per Household

(A) YIELD	(B) EDUCATION	(C) INCOME
Barron	———	———
Bayfield	———	———
Columbia	Columbia	———
Dane	Dane	Dane
Douglas	Douglas	Douglas
Eau Claire	Eau Claire	Eau Claire
Florence	———	———
Fond du Lac	———	Fond du Lac
Jefferson	Jefferson	———
Kenosha	Kenosha	Kenosha
La Crosse	La Crosse	La Crosse
Milwaukee	Milwaukee	Milwaukee
Polk	———	———
Racine	Racine	Racine
Rock	Rock	Rock
Walworth	Walworth	———
Washburn	———	———
Waukesha	Waukesha	Waukesha
Winnebago	Winnebago	Winnebago

Counties Which Ranked in Highest Group in Education or Income But Not in Yield

	Ashland	Brown
	Brown	Green
	Iowa	Outagamie
	Grant	Ozaukee
	Oneida	Portage
	Vilas	Sheboygan
	———	Washington
	———	Wood
	———	

TABLE 16B. Counties With (A) Lowest Yields; (B) Lowest Educational Level of Adult Population; (C) Lowest Income Per Household

(A) YIELD	(B) EDUCATION	(C) INCOME
Calumet	Calumet	— — —
Clark	Clark	— — —
Door	Door	— — —
Green Lake	— — —	— — —
Iron	— — —	Iron
Jackson	Jackson	Jackson
Juneau	Juneau	— — —
Kewaunee	Kewaunee	— — —
Lincoln	— — —	Lincoln
Manitowoc	— — —	— — —
Marquette	— — —	— — —
Marathon	Marathon	— — —
Marinette	— — —	— — —
Oconto	Oconto	Oconto
Price	Price	Price
Rusk	Rusk	— — —
Sauk	— — —	— — —
Sawyer	Sawyer	Sawyer
Shawano	Shawano	— — —
Taylor	Taylor	— — —
Trempealeau	— — —	Trempealeau

Counties Which Ranked in Lowest Group in Education or Income But Not in Yield

	— — —	Adams
	— — —	Barron*
	— — —	Bayfield*
	Buffalo	Buffalo
	Burnett	Burnett
	— — —	Florence*
	Forest	Forest
	— — —	Polk*
	Vernon	Vernon
	— — —	Vilas
	Waushara	Waushara
	— — —	Washburn*
	Wood	— — —

**Counties which ranked in the highest group in yield. See Table 16A.*

The partial correlation coefficients were:

between yield and income with effect of education eliminated = .17.

between yield and education with effect of income eliminated = .58.

These correlation coefficients are straws in the wind which suggest that educational level and income level do account for a considerable amount but not all of the difference in yields, and that of the two factors, educational level of the adult population was a more powerful influence than income level per household upon the yield of Wisconsin's 1957 high school graduates. Variations in county and community yields from year to year would be expected, particularly in counties which had low numbers of graduates. The relative rankings of these counties could shift markedly from year to year because the percentages would be based upon low numbers. (Florence county is an example.)

Comparisons of the ranks of the counties in this study with their ranks in other recent years show that with few exceptions the counties remain in the same one-fourth of their distributions. The variation was not great enough to question the general significance of the findings.

5. **The Facts About the High School Graduates.** The study then focused upon the answers which the high school graduates had given to the questionnaire on which they had stated their plans for education beyond high school, and had given certain information about themselves, their parents, their schools, and their opinions about the value of going to college. The assumption was that the answers given by students in low yield schools might differ in important ways from those given by students in high yield schools. This assumption was then tested in the following ways:

1. a comparison of two schools of like size, one chosen from a high income-low yield county, the other from a low income-high yield county.
2. a comparison of two groups of schools, one group composed of those with the lowest yields of schools of their size, the other composed of those with the highest yields of schools of their size.
3. a comparison of two public schools within a university city, the schools having widely differing yields.

School and Community Differences

1. **High Income-Low Yield School Versus a Low Income-High Yield School.** Two communities were selected for comparison, one from the counties which had shown high income but low yield, the other from the counties which had low income but high yield (see Map C). These communities are described below.

Community A (high income-low yield) has a population of about 2,000 and is located in an east central county (Region V). It is in a rural area of a county which is 60 per cent urban. Two private colleges, one sectarian, lie within twenty-five miles. The nearest state college is forty miles away; a second state college is seventy miles distant. A county teachers' college is within twenty miles. The school had ninety-five graduates in spring, 1957, and is in the second largest community of the county. The income per household of the county in which it is located is between $5,500 and $6,000. Yield = 19 per cent.

Community B (low income-high yield) has a population slightly over 2,500 and is located in a northwest county (Region II). It is an area more predominantly rural than Community B. The nearest state college is forty miles away, although five state colleges are within a radius of one hundred miles. A county teachers' college is within ten miles. The region has no private colleges. The school had ninety-one graduates in the spring, 1957, and is in the second largest community of the county. The income per household of the county is between $4,000 and $4,500. Yield = 39 per cent.

The earlier study had shown that graduates who elect to attend college differ in important ways from those who do not in the following characteristics:

1. scholastic aptitude.
2. scholastic achievement.
3. occupation of parents.
4. educational attainment of parents.
5. economic status of family.
6. encouragement by teachers.
7. encouragement by parents.
8. plans of close friends.
9. opinions about the value of going to college.

The following sections compare Community A with Community B on this set of characteristics and some others. The comparison is based upon the responses of the graduates to the questionnaire (My Plans Beyond High School) administered by their school shortly before their graduation in spring, 1957.

TABLE 17. Rank of Graduates on a Mental Test

	TOP 30%		MIDDLE 40%		LOWEST 30%		TOTAL	
	N	CG*	N	CG	N	CG	N	CG
Community A	14	9	38	6	43	2	95	17
Community B	28	17	41	18	22	3	91	38

**CG = College-going Students; N = Number of Graduates.*

a. *Scholastic aptitude*. The mental test scores were provided from records of the state-wide high school testing program, described in Part I, pages 13 and 14.

Note first that Community B had twice as many graduates who scored in the top 30 per cent; and that Community A had practically twice as many graduates who scored in the lowest 30 per cent. The previous study had established that 55 per cent of all college-going graduates had come from the top 30 per cent and only 9 per cent from the lowest 30 per cent on the mental test. The differences in scholastic aptitude between the graduates of the two schools, therefore, account for an important share of the total observed differences.

Observe, however, that the proportion of college-going from the top 30 per cent group in each school was approximately equal, Community A showing even a higher percentage – 64 per cent, to 60 per cent for Community B. The greatest difference occurred in the middle 40 per cent group, where Community B yielded three times as many college-going graduates from an approximately equal number of students of that ability.

The difference in number of top 30 per cent graduates explains part of the school differences, but the large difference in yield from the middle 40 per cent remains to be explained.

b. *Scholastic achievement*. The previous study had established that very high proportions of students who had ranked high on both the mental test and in achievement in their high school studies attended college. A study of the graduates in the two comparison schools, shows that Community B (high yield) had twenty such graduates to ten in Community A. The proportion of college-going from these groups was fifteen to seven, respectively.

Among the graduates who ranked in the middle 40 per cent on the mental test scores, ten out of forty-one in School B ranked in the top 30 per cent of their classes in scholastic achievement, and of these five were college-going. In Community A, thirteen out of thirty-eight graduates had similar achievement and four were college-going. In summary, the findings on scholastic achievement add no new explanatory evidence to that provided by the data on scholastic aptitude.

c. *Occupation of parents.* The occupations of the fathers in the two communities are shown in Table 18.

TABLE 18. **Occupation of Parents**

OCCUPATIONS	COMMUNITY A		COMMUNITY B	
	N	CG	N	CG
Professional and Executive	5	3	16	9
Small Business	11	3	15	6
Farm	43	4	35	13
Factory	23	3	9	3
Office and Sales	3	0	5	4
Skilled Labor	4	1	7	3
Other	6	3	4	0
TOTAL	95	17	91	38

The occupations which have relatively high yields state-wide are "professional and executive," "office and sales," and "small business." "Farm" occupations have conspicuously low yields. Table 18 shows that Community B outnumbered Community A in the characteristically "high yield" occupations 36 to 19, and provided 19 college-going graduates from these groups to Community A's 6. These findings shed new light upon the observed school differences, showing the importance of the occupational patterns in the communities. The strong difference in yield among the children of farmers in the two communities remains to be explained.

d. *Educational attainment of parents.* College-going has been demonstrated to be related to the educational attainment of the parents. Children of parents who have attended college go to college in much higher proportions than children of parents of lesser educational attainment. Table 19 shows the

TABLE 19. **Educational Attainment of Parents**

	COMMUNITY A		COMMUNITY B	
	N	CG	N	CG
Had not attended high school	48	7	35	8
Attended or graduated from high school	36	9	31	16
Attended or graduated from college	6	1	17	10
Not reported	1	—	12	4
TOTAL	91	17	95	38

educational attainment of the fathers of the graduates of the two comparison schools.

These findings show a higher level of educational attainment among the fathers of graduates who reported in Community B than in Community A. The difference in number of and yield from graduates whose fathers had attended college is most striking. Also interesting is the fact that of the college-going in Community A the great majority was coming from groups of fathers who had a high school education or less while a heavy majority of the college-going in Community B had fathers who had had some high school education or more.

e. *Economic status of family.* There were two estimates of the ability of the families to finance a college education: (1) the graduate's estimate of the income or wealth of his family in comparison with other families in his community; and (2) the graduate's estimate of the amount in dollars which he and his family could contribute to college expenses in the year following his graduation. Each of these measures has limitations. An estimate of the reliability of the responses was checked in the earlier study comparing the responses of girls to the responses of boys on questionnaire items on which boys and girls would be expected to respond alike. No statistically significant differences were found.

TABLE 20. Graduates' Estimate of Personal and Family Contributions to College Expenses

ESTIMATED CONTRIBUTION	COMMUNITY A			COMMUNITY B		
	N	CG	%	N	CG	%
Less than $500	20	3	15	35	9	26
$500 — $1,500	48	12	25	36	15	42
All expenses	5	0	0	18	9	50
TOTAL	73	15	—	89	33	—

The number of graduates who reported that they could provide more than $500 toward college expenses was practically equal in both communities, but many more in Community B reported that their families can provide all college expenses. Community B also had many more graduates who reported that their family resources could provide less than $500. These facts reflect in some degree the differences previously reported about the average income per household in the counties in which the two schools are located. In each level of income reported, however, Community B exceeded Community A in yield of college-going graduates. Seen in relation with the occupations of the fathers, it appears that Community A has a high proportion of families with moderate income; and that Community B has a wider range of incomes among its families.

f. *Other educational plans.* Since in the state as a whole, about 15 per cent of the graduates, predominantly girls, were continuing to schools other than those which grant credits toward degrees, the data were studied for possible differences in yield of such students. It was found that eighteen graduates in Community A were going to such schools and fourteen in Community B. The total number of graduates continuing to some types of school, then, was: Community A, 35; and Community B, 52 – or 38 per cent and 55 per cent of their graduates, respectively. It is important to note that one more graduate from Community A was attending this type of school than was going to college. In Community B the number of college-going exceeded the "school-going" by 24.

All of these data suggest that there may be differences between the schools in the motivations, aspirations, and educational values of the graduates and their parents. The following sections consider some of these facts.

g. *Desire to attend college*. The graduates reported whether they had ever considered attending college. If they had not considered attending, they were then asked whether they would have considered it if they had had the money. Table 21 compares the two schools on the responses to these questions.

TABLE 21. Graduates' Interest in Attending College

ITEM	COMMUNITY A	COMMUNITY B
Considered going	51	74
Did not consider it	40	13
Would not consider it with money to go	33	10
Not reported	0	8

An extraordinary difference shows up in the proportions of students who had not considered attending college. Very small proportions of graduates who had not considered attending change their plans. Note also that in both schools about 80 per cent of those who had not considered attending said that they would not do so even if they had the money. Only three graduates who ranked in either school in the top 30 per cent on a mental test score reported that they had not considered attending college. Two of these three graduates reported that they would not have attended if the money were available. A major part of these differences between the communities on this item stems from the larger number of graduates in Community A who had shown low scholastic aptitude and achievement (see Table 17). For this group, the incentive and the desirability of attending college are not strong.

h. *Encouragement by teachers*. The graduates reported the extent to which their teachers had encouraged or discouraged college attendance. Very few graduates reported that their teachers had discouraged their attending college, but many reported that the teachers have had no effect upon their decision about education beyond high school. Table 22 compares the responses in the comparison schools to this type of inquiry.

Many more students received encouragement by teachers in School B, but it must be remembered that there were also more graduates with high potential for college success in that school. The difference is large enough to suggest that school and teachers, as such, may figure more predominantly in the lives of students in Community B than in Community A.

TABLE 22. Effect of Teachers Upon College Plans

	COMMUNITY A		COMMUNITY B	
	N	CG	N	CG
Encouraged me	34	12	57	32
Discouraged me	2	—	—	—
Had no effect on my plans	57	5	31	6

i. *Encouragement by parents.* In general, high school graduates credit their parents with stronger influence upon their plans beyond high school than they credit their teachers.

Positive parental interest and encouragement for college attendance have been shown to produce higher yields. Table 23 shows the difference in parental attitude toward college-going as reported by the graduates. Note the almost complete reversal between "parents want me to go" and "parents don't care whether I go" between the two communities. Observe also that when the parents are either indifferent or antagonistic toward their children attending college, very few make plans to go. Positive encouragement as sensed by the graduates led to much higher yields.

A sidelight on parental attitudes appeared when it was found that if their children ranked in the top 30 per cent, four out of five parents in each school wanted them to attend college; but if the children ranked in the middle 40 per cent, the parents in the two communities differed markedly in the number who encouraged college-going: 57 per cent in Community B, and 25 per cent in Community A.

TABLE 23. Encouragement Toward College-Going by Parents

ATTITUDE OF PARENTS	COMMUNITY A		COMMUNITY B	
	N	CG	N	CG
Want me to go	28	13	59	36
Don't care whether I go	48	3	24	2
Don't want me to go	14	0	6	0
Did not report	1	1	6	0
TOTAL	91	16	95	38

j. *Plans of friends.* It had been established that, in general, the plans of the graduates were strongly associated with the plans of their friends. The facts for the comparison schools are shown in Table 24. This table includes the number continuing to some type of school, as well as the college-going.

The degree of association between the plans of the college-going and the plans of their friends is markedly lower in Community A, in which only 37 per cent of these graduates reported that their friends had the same plans.

In Community B, this percentage was 83 per cent. In Community A, only 13 per cent of the graduates who were not continuing their education had friends who were going on to school or college. In Community B, this percentage was 33 per cent. To the extent that high school graduates were influenced by the values and actions of their friends, the pull definitely was toward discontinuing education in Community A and toward going to school or college in Community B.

TABLE 24. Plans of the Friends of the Graduates

PLAN OF GRADUATE	PLANS OF FRIENDS					
	Continuing		Noncontinuing		Total	
	A	B	A	B	A	B
Continuing education	13	43	21	9	34	52
Not continuing education	8	13	53	26	61	39
TOTAL	21	56	74	35	95	91

k. *Interest in studies.* As a measure of their liking for school, the graduates were asked to respond to the following question:

> "High school studies: (a) have been interesting, I want to learn more; (b) have been uninteresting, I would rather work than study; (c) have had no especial influence upon my plans."

No important differences were found between the graduates of the two schools in their responses to this question. Only fifteen graduates (six in Community A, and nine in Community B) reported that their studies had been uninteresting; and nine of these were students ranking in the lowest 30 per cent in scholastic aptitude. Between 55 and 60 per cent of the graduates in each school reported that their high school studies had been interesting, but 30 per cent in each school said that high school studies had not influenced their plans. Very high percentages of the top 30 per cent in each group, however, reported that their studies had been interesting, and all but three of the college-going so reported.

l. *Type of college elected.*

TABLE 25. Preferences of Graduates for Public or Private Colleges

	COMMUNITY A	COMMUNITY B	BOTH
Public	12	33	45
Private	5	5	10
TOTAL	17	38	55

The much larger proportion of college-going graduates from Community A who preferred private colleges may be associated with its comparatively low yield. The county in which Community A is located was one of the highest in the state in the proportion of college-going graduates who planned to attend private colleges (48.3 per cent). Unfortunately the data do not show the religious affiliations of the graduates and it was not possible to test the effect of such facts upon college preferences and college attendance.

m. *Ethnic background.* Community A is predominantly German in background and Community B is predominantly Norwegian. Differences in values placed upon higher education and in opinions about who should attend college are known to exist between people of different nationalities. Such differences may in part explain some of the differences seen between the graduates and parents in these two communities.

n. *Summary.* The important differences between Community A and Community B are summarized as follows:

FACTOR	COMMUNITY A	COMMUNITY B
Scholastic aptitude	Larger proportions of low aptitude	Larger proportions of high aptitude
Occupations of fathers	Much larger proportion from farm and factory	Larger proportions from professional and executive, and small business groups
Economic status	Larger proportions of average incomes	Larger proportions of both high and low economic ability
Education of parents	Larger proportion had not even attended high school	Larger proportion had attended college
Parental encouragement of college attendance	Larger proportion don't care whether their children go to college	Larger proportion want their children to attend college
Friends	Much larger proportions have friends getting jobs	Much larger proportions have friends attending college
Who goes to college	High ability students especially, lower yield from middle ability group	Higher yields from all ability levels, levels of parental education, and income
Ethnic background	Predominantly German	Predominantly Norwegian
School accreditation	Accredited by the North Central Association	Not accredited by the North Central Association

This comparison shows that a complex of cultural, psychological, and sociological factors are operating in ways which affect attitudes and decisions about college-going. The differences between the parents seem crucial. It is important to note, however, that the difference between the yields of the two communities among their top level students was not as great as the difference in the total yield. The opportunities for good jobs are also better in the area surrounding Community A. Since Community A had larger numbers of students with average or lower scholastic aptitude and interest, its lower yield of college-going students should be expected. There remained, however, important factors which appeared to inhibit the motivation of students who have college aptitudes and abilities in Community A but did not operate with equal strength in Community B.

2. Six High Yield Schools Versus Six Low Yield Schools As a further test of the circumstances which produce differences in yields of schools, distributions of the yields of schools of different size were prepared. Within each of the six groups one school was selected which had an extremely low yield, and another which had an extremely high yield. None of the schools was located in a community which had a four-year college. The responses of the graduates of the six high yield communities were then compared with those of the six low yield communities.

Table 26 shows the size of school and yields in the comparison groups.

TABLE 26. Comparison of Low Yield and High Yield Communities

COMMUNITY	LOW YIELD			COMMUNITY	HIGH YIELD		
	N	CG	CG (%)		N	CG	CG (%)
A	25	1	4	B	24	14	58
C	55	9	16	D	55	24	44
E	74	13	18	F	76	28	36
G	89	22	25	H	88	29	32
I	95	17	18	J	92	38	41
K	355	92	26	L	356	127	36
MEDIAN YIELD (%)	18	—	—		38.5	—	—

The differences between the responses of the graduates of the two communities which have proved to be statistically significant at the .01 level are identified by an asterisk (*) in each of the following seven tables. The figures in parentheses are the numbers from each group who were planning to attend a degree-granting college.

a. *Scholastic aptitude*. The high yield schools have substantially more graduates who scored in the top 30 per cent on mental test scores. The low yield schools have substantially more graduates who scored in the lower 30 per cent. The state-wide yield of college-going graduates who were in the top 30 per cent was 55 per cent; from the low 30 per cent it was 9 per cent.

The yields of the two groups of schools from the three levels of ability are shown below:

TABLE 27. Number and Percentage of College-Going Graduates in High and Low Yield Schools by Ability Levels

	TOP 30%			MIDDLE 30%			LOW 30%		
	N	CG	Y (%)	N	CG	Y (%)	N	CG	Y (%)
Low Yield	199	(84)	42	267	(53)	20	222	(12)	5
High Yield	245	(136)	56	274	(89)	32	172	(22)	13
DIFFERENCE	46*	—	14	7	—	13	50*	—	8

These facts show that differences in the mental ability levels accounted for a part but not all of the differences in the yields of the two groups of schools. The proportions of the graduates of the high yield schools who were college-going exceeded those in the low yield schools at each ability level.

b. *Occupation of parents.* A larger part of the graduates of the high yield schools had parents who were in executive or professional positions, sales or office work, or owned or operated small businesses (Group A). A larger part of the graduates of the low yield schools had parents who were farmers (Group C). The yields among graduates of all Wisconsin high schools from these two groups were 53 per cent and 18 per cent, respectively. The yields of the two groups of schools from these occupational groups were as follows:

TABLE 28. Difference in Composition and Yield of Occupational Groups

	GROUP A		YIELD	GROUP C		YIELD
	N	CG	Y (%)	N	CG	Y (%)
Low Yield	141	(68)	48	160	(22)	13
High Yield	206	(99)	48	120	(40)	30
DIFFERENCE	65*	—	0	40*	—	17*

As shown above, the difference in the number and percentage of college-going among graduates whose parents are farmers was strong. The difference in the remaining occupational groups was: low yield, 14 per cent; high yield, 23 per cent. Thus, the over-all differences in yield between the two groups of communities stem not only from differences in proportions of the parents engaged in different types of occupations, but also from differences among parents engaged in similar occupations.

c. *Education of parents.* Sizeable differences existed between the two groups of communities in the level of education attained by the parents of the graduates. In the high yield group, 78 per cent of the fathers had attended high school or beyond; 17 per cent had attended college. In the low yield group, only 57 per cent had attended high school or beyond; and only 11 per cent had attended college. More significantly, 43 per cent of the low yield group had not even attended high school, a proportion practically twice as large as found in the high yield group, 22 per cent. The state-wide yield of college-going graduates from these groups was: no high school education, 17 per cent; attended or graduated from high school, 28 per cent; attended college, 64 per cent.

The interesting finding in Table 29 is that the differences between the yields of the two groups tended to vanish when the educational attainment of the fathers increased. Most of the over-all differences in yield, however, stemmed from the differences in educational attainment of the father.

TABLE 29. Differences in Level of Education of Parents and Effect on Yield

	NO HIGH SCHOOL			ATTENDED HIGH SCHOOL			ATTENDED COLLEGE		
	N	CG	Y (%)	N	CG	Y (%)	N	CG	Y (%)
Low Yield	315	(36)	11	261	(70)	27	58	(39)	67
High Yield	209	(59)	28	315	(109)	34	109	(64)	59
DIFFERENCE	−106*	—	+17*	+54	—	+7*	+59*	—	−8

The data upon the education of the mothers were not sufficiently different from those of the fathers to warrant separate presentation. It would be substantially correct to consider that the analysis refers to both parents.

d. *Ability to afford a college education.* The differences between the two groups in reported ability to contribute to college expenses were not significant, although data suggested slightly more favorable circumstances for the high yield group. Both groups showed responses similar to that reported in the state-wide data.

The yields from each of the reported levels of contribution for each of the comparison groups are shown below.

TABLE 30. Differences in Ability to Contribute Toward College Expenses and Effect on Yield

	LESS THAN $500			$500-$1,500			ALL EXPENSES		
	N	CG	Y (%)	N	CG	Y (%)	N	CG	Y (%)
Low Yield	278	(48)	17	217	(56)	26	76	(29)	38
High Yield	245	(57)	23	259	(119)	46	99	(51)	51
DIFFERENCE	23	—	6	42	—	20*	23	—	13*

The information shown above shows that factors other than reported ability to finance a college education must be at work to create the observed differences in yields between two groups. This is shown most strikingly in the differences of yield among those who reported that they could contribute from $500 to $1,500 of all college expenses. This finding is consistent with other indications found in the study that economic factors make considerable difference at the extremes of economic ability, but that within the large middle income groups, other circumstances are more significant.

e. *Encouragement by teachers.* There were marked differences between the two groups in the proportions who reported that they had been encouraged by their teachers to attend college. In the low yield schools, this proportion was almost equal to the state proportion; but in the high yield schools, this proportion was considerably higher. In the state as a whole, 52 per cent of the graduates who had been encouraged to attend college actually planned to do so. In the comparison groups, 64 per cent of the graduates in the high yield schools and 44 per cent of those in the low yield schools had college-going plans. This difference must be interpreted in the light of the differences in ability levels reported.

In the light of the ability differences, it should be expected that fewer graduates in the low yield schools would be encouraged to attend college. On the other hand, it was found that in the high yield schools, 71 per cent of the graduates had been encouraged by their teachers; in the low yield schools, 47 per cent. This discrepancy suggests possible differences in the guidance activities of the two sets of schools; or in the effectiveness of college counselling programs. A stronger likelihood is that differences in cultural backgrounds and educational aspirations between the families of the two communities predispose more graduates in the high yield schools to seek and value the counsel of their teachers about going to college.

f. *Encouragement by parents.* One of the most striking and important findings was the difference in the proportion of parents who wanted their children to attend college. In the state as a whole, 53 per cent of the graduates whose parents wanted them to go to college were going to college. If the parents did not care, 5 per cent were going. The facts about the comparison groups are as follows:

TABLE 31. Differences in Parental Encouragement of College Attendance and Effect on Yield

	PARENTS WANT THEM TO GO			PARENTS DON'T CARE		
	N	CG	Y (%)	N	CG	Y (%)
Low Yield	303	(129)	42	332	(13)	4
High Yield	407	(229)	56	225	(13)	5
DIFFERENCE	+104*	—	+14*	−107*	—	−1*

As shown in Table 31, the difference between the two groups in the total number of college-going (CG) is 100. The data suggest that the entire difference can come from the difference in the number of parents who want their children to go to college. When parents "do not care" whether their children go to college, very small percentages attend college, and the difference between the high yield and low yield groups is negligible.

g. *Consideration given to college attendance.* A much larger part of the graduates of the low yield schools reported that they had never considered attending college, two for every one in the high yield schools. This fact, when coupled with the information that four out of five graduates reported that they would not attend college even if they had the money, gives a picture of low desire for college attendance. The graduates of the high yield schools were college-minded, 85 per cent having considered attending. Those who had not considered it, however, were like their counterparts in the low yield group — four out of five would not have considered it even if they had the money.

h. *High ability students.* Graduates who rank in the top 30 per cent on a standard mental test furnish 55 per cent of all the college-going graduates and comprise a still larger part of those who will persist to college graduation. Since the two comparison groups differed in their proportions of high ability graduates, it was decided to test whether the other background differences found between the entire graduating classes were also present in the graduates who ranked in the top 30 per cent on the mental test.

Table 32 shows these differences. In general the same differences between the total low yield group and the total high yield group persisted among the top 30 per cent of the graduates of each group. The percentages of college-going groups were elevated considerably in both groups. High scholastic aptitude and achievement, then, are accompanied by higher college attendance regardless of other background characteristics; but basic differences between the communities in other characteristics of the students and their parents produce the wide differences observed in college plans.

TABLE 32. Comparison of Graduates in Top Thirty Per Cent of Mental Test Scores (Six High Yield Versus Six Low Yield Schools)

	LOW YIELD	HIGH YIELD
NUMBER	199	245
Number college-going	84	137
% college-going	42	56
OCCUPATION	(% college-going)	(% college-going)
Group A	67	62
Group B	35	43
Group C	32	47
EDUCATION OF PARENTS	(% college-going)	(% college-going)
No high school	32	46
Attended high school	44	55
Attended college	73	75
ENCOURAGED BY PARENTS	(% of total)	(% of total)
Want me to go	61	74
Don't care whether I go	38	23
Don't want me to go	2	3
ENCOURAGED BY TEACHERS	(% of total)	(% of total)
Encouraged	72	69
Discouraged	2	1
No effect	26	30
CONSIDERED ATTENDING	(% of total) 89	(% of total) 91
Had never considered attending	11	9
Would not have considered attending even if had money (Of those who had never considered attending)	(% of 11%) 60	(% of 9%) 73

i. *Sex differences.* The total observed differences reported so far mask the known sex differences in college-going. To test whether the two comparison groups were different in yields of college-going men or women, the following table was prepared.

TABLE 33. Comparison of Yields of Men and Women Graduates

	WOMEN			MEN		
	N	CG	CG (%)	N	CG	CG (%)
Low Yield	373	(68)	18	315	(81)	27
High Yield	359	(129)	38	332	(121)	38
DIFFERENCE	17	—	11	14	—	20*

This information reveals that the difference in the yield between the two groups of schools was composed of 60 per cent women and 40 per cent men. Further analysis revealed the following additional facts.

1. The differences in yield from women graduates of the two groups were substantially larger than from men graduates at all ability levels. The yield from the top 30 per cent of men in the low yield schools was 51 per cent; in the high yield schools, 57 per cent. For the women, the percentages were 35 per cent and 54 per cent, respectively.

2. The proportion of parents who wanted their daughters to attend college was, in the low yield schools, 45 per cent; in the high yield, 58 per cent. For men these figures were 41 per cent and 55 per cent, respectively.

3. Thirty per cent of the women in the low yield schools had never considered attending college. Of these, 13 per cent were among the top 30 per cent in mental ability. In the high yield group, these percentages were 13 per cent and 15 per cent, respectively.

The percentages for the men did not differ significantly from those for the women. In summary, the factors which produced differences in yield between the two groups as a whole operated to make for wider differences in college-going among women than among men.

j. *Summary.* The facts revealed in this section corroborate the evidence presented in the comparison of Community A and Community B. Differences in scholastic aptitude, occupations of parents, educational level of parents, and parental encouragement toward college attendance again came into bold relief. To this was added the information about the differences in proportions of students who have not even considered attending college. Once again, however, the differences in yield narrow or vanish when only the students of high scholastic aptitude or achievement are considered. For those schools whose primary concern is the conservation and development of the academically talented student, the situation is not bad.

It should not be assumed that high schools with low yields of college-going graduates are not doing their jobs as well as schools with high yields. Only

30 per cent of Wisconsin high school graduates in spring, 1957, were going to degree-granting colleges. It would not necessarily be good if this percentage were 50. Certainly, individual schools should not attempt to use a state-wide average as a standard. Many graduates prefer to attend other types of schools, or enter occupations which have excellent training programs but have different emphases and purposes than do colleges and universities. The diverse abilities and interests of the graduates rightly should be matched with diverse educational opportunities and programs. The school is doing its best job when it helps its graduates match their plans with their aptitudes and interests.

3. **School Differences Within a City.** As shown earlier, there are wide differences in the yields of single schools within communities. Since the major share of the expense of going to college lies in the cost of living away from home, it was decided to study differences between certain schools within the urban area of the city of Madison. Madison is the home of the University and has one private college. A graduate of any Madison high school would find college opportunity to match practically any career goal. None of the graduates would be required to live away from home. From the standpoint of expenses, there should be little difference in yield among the graduates of the several schools who are able to meet the cost of tuition, books, supplies, and incidental expenses at the University. (Estimate, $350.)

Two of the seven high schools in Madison's urban area were selected for study. One school had a comparatively low yield; the other, a high yield.

The size and yield of the seven high schools in the metropolitan area of Madison and the schools selected for comparison are shown in Table 34.

TABLE 34. Differences in Yields of High Schools Within an Urban Area

SCHOOL	N	CG	CG (%)
*A	327	122	37
B	133	67	50
C	150	48	32
D	67	51	76
*E	283	204	72
F	46	13	28
G	93	35	38

**Selected for comparison.*

The observed wide difference among these schools shows that factors other than nearness to a college opportunity are necessary to equalize college-going among schools. Note, however, that all of the schools have higher than average yield, most of them considerably higher. The basic differences between the two schools selected for comparison are shown in Table 35.

TABLE 35. Comparison of Two Schools Within an Urban Area

	SCHOOL E		SCHOOL A	
	N	% (of N)	N	% (of N)
MENTAL TEST SCORE				
Top 30%	128	58	116	44
Middle 40%	57	26	92	36
Bottom 30%	34	16	53	20
Total	219	—	261	—
Yield from top 30%		81		74
Yield from middle 40%		46		21
Yield from bottom 30%		33		7
OCCUPATION OF FATHER:				
Professional & executive		43		8
Factory, service, & semi-skilled work		10		45
EDUCATION OF FATHER:				
No high school		7		18
Attended high school		31		53
Attended college		61		29
College graduates		(55)		(8)
ENCOURAGEMENT BY PARENTS:				
Want me to go		84		56
Don't care whether I go		14		39
Don't want me to go		2		5
ENCOURAGEMENT BY TEACHERS:				
Teachers encouraged college attendance		49		39
Top 30% who were encouraged		56		67

SEX DIFFERENCES—YIELD FROM:	M	W	M	W
Top 30% (class rank)	74	90	77	52
Middle 40% (class rank)	48	44	24	22
Bottom 30% (class rank)	22	44	17	11

In addition to the information shown in Table 35, the responses of the graduates of the two schools to the opinions about the value of a college education (Questionnaire item 30, Appendix B) were tabulated.

Only those items which were checked much more frequently than could have occurred by chance are shown. Only the responses of those not planning to go to college which were checked much more frequently than could have occurred by chance were used.

Items most often checked by graduates of School E (in order of frequency) are:

1. "I would rather start earning money quickly, and learn on the job."
2. "College graduates get jobs with better pay."
3. "Going to college enables you to study many lines of work before deciding on a career."
4. "College life broadens you socially and develops your personality."

Items most frequently checked by graduates of School A (in order of frequency) are:

1. "I would rather start earning money quickly and learn on the job."
2. "College graduates get jobs with better pay."
3. "Going to college would be a waste of time for me."
4. "Learning on a job is more practical than most school learning."

The differences between the schools on the third and fourth responses resulted from differences in the opinions of the girls. Many more of the girls in School A had negative opinions about the value of a college education. More of the girls in School E showed responses similar to those checked by their college-going classmates.

The responses of the noncollege graduates in the top 30 per cent of mental test scores were not essentially different from those shown for the total group.

In summary, the differences in yield between School E and A stemmed almost directly from differences in the educational attainment of the parents. In School E where 55 per cent of the parents were college graduates and 45 per cent held professional and executive positions, the trend toward college-going prevailed through all ability levels. Its yield from the lowest 30 per cent of mental test scores was considerably higher than the average state-wide yield from all levels of ability. Graduates of School A in which fewer than 10 per cent of the parents were college graduates, and almost half were employed in factories, skilled work, or unskilled labor, were continuing to college in smaller percentages than in School E, but in much higher proportions than is general in the state. Among the parents whose educational attainment was similar, the differences between the two schools narrowed, but did not vanish. The strong differences in the proportions of parents who want their children to attend college extended to graduates in the top 30 per cent of mental test scores.

A study of the individual responses of the noncollege-going graduates who had ranked in the top 30 per cent of mental test scores revealed these interesting additional facts.

1. The high-ability, noncollege-going boys in each school had not done as well as the college-going boys in their high school studies. Fifteen out of twenty-nine ranked in the lower half of their graduating classes (average percentile rank = 44). In School A four out of twelve were going into military service, six were getting jobs, and two were going to trade schools. In School E, thirteen out of seventeen were entering military service, three were getting jobs, and one had no definite plan.

Five of the boys who were going into military service had definite plans to enter college after this service was completed, one in School A, and four in School E.

2. There was a striking difference between the schools in the plans of the high-ability, noncollege-going girls. In School E, four out of seven of the girls had ranked in the lower half of their classes in high school achieve-

ment. In School A, twenty-three of the thirty girls had ranked in the upper half of their classes. In School A, 23 out of the 30 girls were getting jobs, four were taking trade or apprenticeship training, one was getting married, and one had no definite plans. In School E, six of the seven girls were planning to get jobs, one of whom was also getting married. One was entering a dental laboratory for apprenticeship training.

3. Sixteen of the sixty-six noncollege-going top 30 per cent (mental test) graduates reported that they could not afford to attend college. Fourteen reported that their families could provide their total expenses.

4. Twenty-three out of the sixty-six graduates who ranked in the top 30 per cent, both on the mental test and in class rank, did not plan to attend college.

The following thumbnail sketches describe the individual circumstances of some of these students, using pseudonyms to identify them.

High Motivation — College Postponed

Jack (School E). Mental test, ninety-second percentile. Rank in class, ninety-second percentile. Both parents have college degrees. A sister is attending college. Family can pay all expenses. Has been encouraged by his teachers to attend college, and his parents want him to attend. He reports he would be greatly dissatisfied to stop at his present level of education. He was entering military service on the six-month plan to remove this hurdle on the path to an uninterrupted college education.

Low Motivation for College

Jane, (School A). Mental test, ninety-second percentile. Rank in class, eighty-second percentile. Father is a truck driver and mother works in a factory. The father did not attend high school and the mother is a high school graduate. Jane has no brothers or sisters. The family income is average, but could easily pay her college expenses. She has never considered attending college and would not consider it if she had the money. Her parents do not care whether she attends college; her teachers have had no effect upon her plans, and her friends are getting jobs. She reports that her high school studies have been uninteresting. She wants to do office work and plans to get a job. She says college would be a waste of time for her and she would rather start earning money quickly.

Border-line Motivation for College

Mary (School A). Mental test, eighty-seventh percentile. Rank in class, ninety-second percentile. No father in household. Both parents attended high school and father was a high school graduate. Mother works in a factory. Two siblings have attended college. The family income is reported to be average and sufficient to provide all college expenses with some sacrifice. She has considered attending college and her teachers have encouraged her to go. She reports that her mother does not care whether she goes. Her high school studies had no special influence upon her plans. She emphasizes the social and leadership values of a college education. Her friends are getting jobs and she plans to enter secretarial work.

Prefers Other Type of School

Joan (School A). Mental test, seventy-second percentile. Rank in class, ninety-seventh percentile. Her father is a factory worker and did not attend high school. Her mother attended high school and does some work as a practical nurse. There are two younger siblings in the family. The family income is average and she reports that her family could easily afford her college education. She has considered attending college; her teachers have encouraged her to go and her parents want her to go to college. She found high school studies interesting. She says that she would be dissatisfied to stop at her present level of education and that college would be broadening and help develop skills that the country needs. Her friends are getting jobs. She plans to enter an airline school and train for work in airline reservations. She considers this a form of additional education.

Prefers to Work

Donna (School A). Mental test, seventy-second percentile. Rank in class, seventy-seventh percentile. Father is a skilled worker in the building trades. Both father and mother attended high school, but were not high school graduates. One of her two siblings has attended college. The family income is average and her family can easily afford her college expenses. Her parents want her to go to college and she has considered doing so. She says that her high school studies were interesting and she believes she would enjoy college studies. Her friends are getting jobs and she prefers to enter office work.

In summary, it is seen that the presence of a college within a community is not sufficient in itself to induce some students, including high-ability students, to undertake college studies. But as shown here and elsewhere in these studies, decisions not to attend college are infrequently found among the children of parents who have attended college. The very high yields from all Madison schools seems to be as much explained by the high level of educational attainment of its population (12.4 years) as by the presence of the University. These two factors are interrelated, of course. The presence of the University has brought more people of high educational attainment to the community. This situation holds in varying degrees among all communities which have four-year colleges. The point being made here is that college towns have populations of different cultural and sociological backgrounds, and this circumstance accounts for a considerable part of their higher yields of college-going graduates.

4. The Students Who Attend Private Colleges.[4] The earlier study shows that seven out of ten students who were planning to continue their education beyond high school were going to publicly-controlled colleges. The study also shows that 40 per cent of the graduates of private high schools in the state were planning to continue school as compared with 29 per cent of the public high school graduates.

The private high schools which participated in the study were: two military schools, five independent college preparatory schools, three Lutheran parochial schools, and thirty-nine Catholic parochial schools. These schools represented 84 per cent of the private high schools in Wisconsin. They represent about 10 per cent of all high schools in the state and furnished approximately 10 per cent of the high school graduates in the spring of 1957. As would be expected, a larger part of the graduates of private high schools continued to private colleges, particularly graduates of parochial high schools. In total, the private high schools furnished 16 per cent of all the college-going graduates. Two-thirds of these were attending private colleges.

The counties of the state differ considerably in the proportion of their college-going students who attend private colleges. This proportion varies from 0 to 63 per cent.

Map F (Appendix A) identifies the counties in which the proportion of college-going graduates who planned to attend private colleges was high (highest fourth, 28 to 63 per cent), and those in which this proportion was low (lowest fourth, 0 to 13 per cent). The median was 21 per cent.

The low yield counties are predominantly in either rural, central, and northwest counties which have low income or in counties of those areas which have state colleges. In contrast the high yield counties are predominantly in eastern urban counties, the majority of which have some type of private college. Note that Ashland and Bayfield counties are exceptions to the low yield previously noted in the northwest counties. This reflects the presence of a private college in Ashland county. Note also that some of the high yield (private college) counties are those which had over-all low yields.

The correlation between the yield of private college-going graduates and income per household in all counties of the state was .66 (rho). The correlation between the proportion going to college and educational level of the counties was .40 (rho).

In a separate study of background differences between the graduates planning to attend private colleges and those attending public colleges, Fintel[4] established among the findings the following interesting facts.

1. More girls than boys planned to attend private colleges, the ratio being 5.6 to 4.4.

2. Eighty-five per cent of the graduates who planned to attend public colleges were going to Wisconsin colleges. Forty-one per cent of those planning to go to private colleges were going to Wisconsin colleges.

3. Significantly larger proportions of those planning to attend private colleges ranked in the top 10 per cent of the state-wide mental test and upon scholastic rank in graduating class. (N.B. — This finding does not say that most of the top 10 per cent of the students attend private colleges. Because of the much larger numbers attending public colleges, they contain a larger number of the top 10 per cent students than do the private colleges. They also have a larger number and proportion of lesser rank.)

4. Significantly fewer graduates from high schools in small towns and rural areas planned to attend private colleges than public colleges, although the total yield in these communities was small in comparison with the yield in urban areas. The private colleges enrolled only 15 per cent of the college-going graduates from small schools (less than sixty graduates) in comparison with 25 per cent of those from large schools (260+).

5. Graduates who planned to attend private colleges had, in significantly larger proportions, parents who had attended college than did those going to public colleges. The public college-going students had significantly larger proportions of students whose parents were not college graduates.

6. The graduates planning to attend private colleges came in significantly higher proportions from families of reportedly above average income. The larger proportion of the graduates going to public colleges came from families in which the family income was reported to be average. There was no significant difference in proportion among those whose family income was below average.

7. The graduates going to private colleges came in significantly larger proportions from homes in which the fathers were in professional or executive positions. The public college group contained significantly higher proportions of graduates whose fathers were working in factories or on farms.

8. A significantly larger proportion of the graduates who were going to private colleges had friends who also were planning to attend any college than was true of the graduates who were attending public colleges.

9. There was no practical difference between the public and private college groups of students in the extent to which their parents had encouraged or discouraged college attendance.

10. When all high school graduates were selected whose fathers (a) held professional and executive positions; (b) had attended college; and (c) had reported that the family could easily afford the college education, the yield of those planning to attend private colleges markedly increased.

In summary, Fintel writes: "In the class of 1957, at least, the best recruiting for private colleges was in the top income, executive, professional, high education type of family. Whether this is good, or wise, is not the point. The private colleges apparently have succeeded in image building — an image which attracts, especially, the affluent and the well-educated."[4]

The findings must be interpreted in the light of the fact that both groups, public and private, are composed of many types of institutions — large and small, universities and undergraduate colleges, sectarian and nonsectarian. Differences between the institutions within each group may exceed some of the differences observed in this study in which a complex of institutions grossly labeled public or private was used. Corroboration of this probability is found in a recent study completed by Knueppel[5] which reports differences between students admitted to Wisconsin's public and private colleges in the fall term, 1958. Knueppel also found that a larger percentage of the public college-going graduates were attending schools that parents or other close relatives had attended than was true of those going to private college. This finding was a surprise in view of frequent assumptions that the reverse is true.*

5. **Accredited Versus Nonaccredited Schools.** A comparison of the yields of public high schools which had been accredited by the North Central Association of Secondary Schools and Colleges and the yields of schools not so accredited revealed the facts shown in Table 36. The differences are shown by size of high school.

TABLE 36. Yields of Accredited Versus Nonaccredited Schools

NUMBER OF GRADUATES	ACCREDITED		NONACCREDITED
	N	Median Yield (%)	Median Yield (%)
Fewer than 60 graduates	30	32.5	22.0
60-119 graduates	44	28.0	20.0
120-259 graduates	39	26.5	22.0
More than 260 graduates	26	34.0	0.0

In each size group, the accredited schools showed definitely higher yields. The margin of difference between the nonaccredited schools was greatest in the small schools. The yield of college-going graduates is not to be considered a major index of the strength of a high school. The fact of accreditation reflects in some measure the leadership which the school has had and the civic interest and pride of the community in its schools.

6. **Observations on Ethnic Background.** A map of Wisconsin showing the predominant ethnic characteristics of its areas and communities was prepared in 1940 as part of the Wisconsin Science Inquiry.[6] While there has been much migration within the state since 1940, it is believed that the ethnic characteristics of the areas of the state have not greatly changed.

Five counties (Barron, Bayfield, Burnett, Douglas, Polk) of the state were found to have populations which were predominantly Scandinavian (Norwegian, Swedish, Danish, or Finnish). The median yield of these counties was 33 per cent. Five other counties (Calumet, Marathon, Outagamie, Portage, Shawano) had populations which were predominantly Polish or German, or a combination of these. The median yield of these counties was 23 per cent.

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* Most of the data for section 4 were developed by Norman Fintel, project assistant, and now Director of Public Relations, Wartburg College, Waverly, Iowa.

This difference occurred in spite of the fact that the second group of counties was definitely more urban than the first group, a factor which usually makes for high yields.

There is much variation in yield, however, among counties and communities which are predominantly German. Calumet and Fond du Lac counties are illustrations. Calumet had a yield of 19 per cent; Fond du Lac, 34 per cent. A cursory examination of other illustrations suggests that the difference between these communities may be a difference between German rural and German urban groups.

On the other hand, communities which were predominantly Polish strongly tended toward lower than average yields regardless of the size of community.

While the percentage differences are not to be considered precise, the trends shown are consistent with the information shown later in this study about the differences in community attitudes toward the importance of education beyond high school.

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PERSISTENCE AND PROGRESS OF ACADEMICALLY TALENTED YOUTH IN COLLEGE

Part III

J. Kenneth Little and Alexander Donaldson

PURPOSE

The objective of this study was to learn to what extent the top-ranking high school graduates who started to college in the fall of 1957 persisted in their college studies and their level of scholastic achievement in college. Attention also was centered upon the circumstances which caused top-ranking students to discontinue college studies.

SUBJECTS

In a previous study a group of 772 academically talented students had been identified for special investigation. These students were selected as follows. A sample of the 34,151 graduates had been drawn by selecting one out of six graduates from each school participating in the study (N = 5,675). Checks of representativeness yielded no significant differences between the sample and the total group. The academically talented student was arbitrarily defined as one who ranked above the seventy-fifth percentile on both the mental test administered state-wide in Wisconsin high schools and in his scholastic rank in his graduating class. This procedure selected 772 students (men = 312; women = 460). Since every such student in the state had an equal chance to be represented in the sample under the procedure used, and the number is large, the 772 students were accepted as representative of all graduates who were academically talented as defined for the purposes of this study

These students had announced their plans about going to college on the high school questionnaire (My Plans Beyond High School) in spring, 1957. During the fall, 1957, and winter, 1958, inquiries were addressed to the parents of these graduates to learn whether these graduates had followed through with their reported plans and if not, what their activities were. If the graduate was attending a college, the parents reported the name of the college. Through this procedure it was learned that 488 students were attending degree-granting colleges (men = 239; women = 249). These students became the subjects of this study.

PROCEDURE

Information had been supplied by the parents of these graduates: whether the graduates were attending college, and if so, at what college. During winter and spring, 1959, inquiries were directed to the registrars of these colleges asking them to report whether the students were still enrolled; if not, the number of semesters they had attended; and if the students had requested that a transcript be sent to another college, to name the college. The registrars were also asked to report the grade-point average earned by the student during his attendance, and for discontinuing students, the reason for discontinuance if that was known by the registrar. (See questionnaire in Appendix B.)

When the reports from the registrars were received, follow-up questionnaires were sent to the registrars of colleges to which the graduates had asked that transcripts of their records be sent. This follow-up was to learn whether discontinuing students had transferred to other colleges.

Follow-up questionnaires were sent directly to all other students who had discontinued, asking their reasons for discontinuance, and their possible plans for return to college.

Table 37 shows the type of institution these graduates chose to attend.

TABLE 37. Type and Place of College Attendance by Sex

TYPE OF COLLEGE	MEN	WOMEN	TOTAL
IN WISCONSIN: (77%)			
Public	144	147	291
Private	40	45	85
OUTSIDE WISCONSIN: (23%)			
Public	21	11	32
Private	34	46	80
TOTAL*	239	249	488

***Total public = 323; total private = 165.**

Slightly more than a third of these students chose to attend private colleges. This is approximately the proportion of the total undergraduate population which private colleges in Wisconsin enroll. There is almost a 50-50 division, however, between the students who attend private colleges in Wisconsin and those who go to private colleges in other states. A comparatively small part of the students who attend public colleges (fewer than 10 per cent) go to such colleges outside Wisconsin.

The percentages of attendance for the several types of schools within the state were as follows: the University, 46; state college, 30; private college, 23; and county teachers' college, 1. The percentages at the University were: Madison campus, 64; Milwaukee campus, 20; and Extension Centers, 16. Among the private colleges, 51 per cent were enrolled at Marquette University.

Of the students who went to college outside the state, 71 per cent chose private colleges and two-thirds of these went to liberal arts or teachers' colleges; the remaining third went to universities. Seven out of ten of those going to public colleges outside Wisconsin went to state universities, the remaining three to state colleges. The students going to college outside Wisconsin enrolled in sixty-four different colleges and universities. One liberal arts college in a neighboring state enrolled ten of these students. Only one other college enrolled as many as five students from this group.

While the proportion of women who attended schools outside the state was the same as for the men, 23 per cent, the proportion who were attending private colleges was higher: 36 per cent as compared with 30 per cent. Seventy-seven per cent of the women attending Wisconsin's colleges attended public colleges; 78 per cent of the men attending colleges in Wisconsin attended public colleges.

FINDINGS

Replies were received from all 104 colleges in which the students first enrolled. Attention was first given to the number who had discontinued their studies.

TABLE 38. Number of Academically Talented Who Were Enrolled Two Years After Entrance to College

TYPE OF COLLEGE	NO. ENTERED (Fall, 1957)	NO. ENROLLED* (Spring, 1959)	LOSS	LOSS (%)
IN WISCONSIN				
Public	291	235	56	19.3
Private	85	71	14	16.4
OUTSIDE WISCONSIN				
Public	32	28	4	12.5
Private	80	71	9	11.1
TOTAL				
Public	323	263	60	18.6
Private	165	142	23	13.9
GRAND TOTAL	488	405	83	17.0

**This number includes forty-five students who transferred from colleges of their first choice, but had not discontinued college attendance.*

About one out of six students had discontinued college studies. Six of the students who were still enrolled had interrupted their attendance since entrance but had re-entered school. The loss tended to be heavier among those attending public schools and those attending Wisconsin colleges. Women students made up 56.5 per cent of the total loss, but the attrition percentage among women was about the same as among men, 15 per cent. The heaviest loss for a single group of students was men students of The University of Wisconsin (Madison) where the percentage discontinuing reached 23 per cent. Counting students who had discontinued, then re-entered, this figure reached 31.7 per cent.

The findings also showed that there was considerable migration by these students. The number of students who are known to have transferred from their schools of original entrance and the type of schools to which they transferred are shown as follows:

From public college to another public college	24
From private college to another private college	4
From public college to a private college	4
From private college to a public college	12
	44

From in-state to out-of-state	5
From out-of-state to in-state	13
From in-state to in-state	22
From out-of-state to out-of-state	4
	44

Before searching for the possible reasons for this attrition, however, the question was asked: Did any of the discontinuing students transfer to other schools? Follow-up inquiries revealed that twelve of the eighty-three discontinuing students had transferred to other colleges without report of such by the colleges of original entrance. This left a total net loss of seventy-one out of 488 or 14.5 per cent. This loss is considerably lower than usual attrition of college students and indicates that academically talented students normally persist in their studies. Attrition after two successful years of college attendance is usually slight. Of the students who answered whether they planned to return to college at a later date, 66 per cent said they did not. Of those who planned to return, 60 per cent were going to another

TABLE 39. Net Loss in Numbers and Percentages from Each Type of College

	NO. ENTERED	NET LOSS	LOSS (%)
IN WISCONSIN			
Public			
University	173		
Madison	111	20	18.0
Milwaukee	35	4	11.4
Ext. centers	27	5	18.5
State colleges	113	16	14.1
County teachers' colleges	5	2	40.0
Private			
University	43	6	13.9
Liberal arts colleges	40	6	15.0
Other	2	0	00.0
OUTSIDE WISCONSIN			
Public			
University	22	3	13.6
State colleges	9	1	11.1
Other	1	0	00.0
Private			
University	24	0	00.0
Liberal arts colleges	54	8	14.8
Other	2	0	00.0
GRAND TOTAL	488	71	14.5

college. If they were going to another college, 60 per cent were going to a smaller college and 35 per cent were going to a larger college.

The net percentage loss by type of school for both men and women is shown in Table 39.

The loss is severe enough, considering the ability levels of the students in this group, to inquire into the major background factors causing them to discontinue their college attendance. Earlier studies had shown that about 15 per cent of the high-ranking men high school graduates and from 25 to 30 per cent of the women were not continuing to college. A further attrition of 15 per cent among top-ranking men and women resulting from discontinuance of college pyramids into a considerable loss in undeveloped human ability. It is important then to consider the major reasons for discontinuance of the original 772 high school graduates of this calibre.

Reasons for Discontinuance

Two lines of evidence were available to assess the conditions or circumstances which led to discontinuance of college studies. The first was the report of the registrars, which also stated the level of scholastic performance the student had maintained. The second was the response of discontinued students to a direct inquiry. (See questionnaires in Appendix B.) Registrars' reports were available on all eighty-nine students who had discontinued their studies (including the six who subsequently re-entered), but not all registrars were able to report a reason for the students' discontinuance. The follow-up inquiry sent directly to the students elicited fifty-seven responses, or 69 per cent of all students who had discontinued at some time and 80 per cent of the seventy-one discontinuees who had definitely left school.

A comparison of the reasons reported from the two groups is shown in Table 40.

The striking information in Table 40 is the high percentage of students who withdrew from school for academic reasons—scholastic difficulty, dissatisfaction with their studies, or preference for a different type of education. Men students give more weight to financial reasons than to academic reasons. The reports of the registrars showing the scholastic averages earned, however, indicate that there may have been a mixture of academic and financial difficulties. Because some of these students were attending on minimum budgets, and had taken part-time work to meet expenses, this apparent discrepancy in the reports of the registrars and students in fact may be consistent. It is also possible that students of this calibre were reluctant to ascribe their discontinuance to difficulty with studies. The over-riding reason for withdrawal among women students was marriage, accounting for almost half of the women who discontinued; academic problems were also prominent, and some women were transferring to secretarial and nursing schools.

The reports of these students and their parents about ability to finance a college education yielded this information. They indicated that three-fourths of them could afford to attend college, one-fourth of them saying "easily." None reported that his family could not afford it. All reported that the income was the average of their communities, one-fourth reporting above average incomes. None was below average.

Three-fourths of the students had cash scholarships ranging in value from $80 to $1,250. The average value was $300.

The emphasis placed by the men students upon financial factors rather than academic may be due in part to the nature of the inquiry. This inquiry (see Appendix B) sought to learn in part whether the students needed financial assistance and what type and amount they could use. Under this circumstance, most of the students reported that they could use money! To admit scholastic difficulty would not be consistent with the hope for a scholarship. Their scholastic records in college, however, would discourage a scholarship application.

The ratios and percentages used in this section are based upon small numbers. They are used only to suggest trends observed in the data.

TABLE 40. Reasons Given for Discontinuing College Studies: by Registrars and by Students

	MEN			
REASON	REGISTRARS		STUDENTS	
	N	%	N	%
ACADEMIC				
Scholastic difficulty	17	63.0	4	16.6
Disliked college				
Dissatisfied				
Attend trade school	3	11.1	1	4.2
FINANCIAL	2	7.4	12	50.0
To take employment	3	11.1	4	16.6
Illness	0	0.0	1	4.2
Marriage	0	0.0	0	0.0
Other	2	7.4	2	8.4
Not reported	14	—	3	—
TOTAL	41	—	27	—
	WOMEN			
REASON	REGISTRARS		STUDENTS	
	N	%	N	%
ACADEMIC	10	27.7	5	17.0
Attend trade school	3	8.4	2	6.8
FINANCIAL	2	5.5	1	3.4
To take employment	2	5.5	1	3.4
Marriage	16	44.4	18	61.2
Illness	2	5.5	2	6.8
Other	1	2.8	0	0.0
Not reported	12	—	1	—
TOTAL	48		30	

Scholastic Record of the Academically Talented in College

As a measure of the level of scholastic achievement of the students who had completed two years of college work, the estimated percentile rank of the students' achievement in comparison with that of all students was used. Such ranks were not furnished by two universities enrolling 154 of these students. One of these was The University of Wisconsin (Madison) upon which a special study is reported in a later section of this report. Information was furnished, however, for 230 continuing students who were enrolled in 85 of the 104 schools. Table 41 shows the decile ranks in scholastic average of these students. As mentioned above, the students are predominantly those attending liberal arts colleges in and outside Wisconsin.

TABLE 41. Scholastic Achievement in College of Top-Ranking High School Students

DECILE	MEN	WOMEN	TOTAL
90-9	13	14	27
80-9	15	13	28
70-9	22	18	40
60-9	15	17	32
50-9	23	18	41
40-9	11	19	30
30-9	7	10	17
20-9	7	2	9
10-9	2	3	5
0-9	0	1	1
TOTAL	115	115	230
MEDIAN (%)	66	61	63.5

As shown in Table 41, only two out of every five of these academically talented youth were maintaining very high scholastic achievement in college studies, 41 per cent ranking in the top 30 per cent of their college class. More than a fourth were ranking in the lower 50 per cent in college achievement. In general, the women were achieving less well than the men. "Making high grades" in college, therefore, presents problems to this group of students which they did not experience in high school. Students who were used to seeing A's predominate their grade report were looking at a few B's, many C's, and even a considerable sprinkling of D's and F's. Table 41 does not include the students who discontinued their studies, at least a third of whom experienced scholastic difficulty in college.

In general, a drop in relative class standing should be expected. Many college freshmen are in this group. For example, between 35 and 40 per cent of the freshmen who entered Wisconsin colleges in 1956-57, public and private, ranked in the top 20 per cent of their graduating classes, 21 per cent in the top 10 per cent. Furthermore, college grades in many courses are determined by relative position in achievement among the students enrolled in the class. These two facts create a competitive situation among this group which predetermines that a larger part of it will receive lower grades or standing. It would not be expected, however, that the sizeable proportions of the top-ranking groups shown in Table 37 would drop to the lower half in college achievement; at least, lack of scholastic aptitude does not seem a reasonable explanation. When these students are added to the groups who were dropped from school because of scholastic deficiency, or who withdrew because of dissatisfaction with their college studies or performance in them, the causes of this attrition also deserve attention.

A Comparison of the Background Characteristics of the Continuing and Discontinuing Students

As a further check upon the circumstances leading to the discontinuance of college studies by academically talented youth, the discontinuing students were compared with the continuing students using two variables. Table 42 presents this information.

TABLE 42. Background Characteristics of Continuing and Discontinuing Students

	CONTINUING		DISCONTINUING	
	N	%	N	%
OCCUPATION OF PARENTS				
Professional and executive	98	25.5	13	15.7
Office and sales	66	17.2	8	9.6
Factory, service, skilled, and unskilled work	138	35.8	29	34.9
Small business	27	7.0	19	22.9
Farmer	54	14.0	14	16.9
TOTAL	383	100.0	83	100.0
EDUCATION OF FATHER				
Did not attend high school	50	12.9	26	29.7
High school (att. or grad.)	169	43.6	46	52.9
Attended college	36	9.3	5	5.8
College graduate	133	34.2	10	11.6
TOTAL	388	100.0	87	100.0
SIZE OF SCHOOL				
0-49 graduates	73	18.3	14	15.8
50-99 graduates	83	20.7	23	25.8
100-249 graduates	118	29.6	24	26.9
250+ graduates	125	31.4	28	31.5
TOTAL	399	100.0	89	100.0

There are no significant differences among the graduates of high schools of the several sizes shown in Table 42. The proportion who discontinue is significantly higher, however, among students whose parents were either farmers or owners or operators of a small business, or whose parents had not attended college, particularly those who had not even attended high school.

In an earlier study, Young reported that the academically talented graduates who had gone to college differed from those who had not gone in the following ways:[2]

1. Larger proportions of the parents of the noncollege boys and girls either had not attended high school or were not college graduates. Larger proportions of the parents of college-going boys and girls had attended or were graduates of colleges.

2. Larger proportions of the fathers of the noncollege boys and girls were in agricultural or factory work. Larger proportions of the fathers of the college-going boys and girls held professional and executive positions.

It is interesting to discover that these two factors are found also to differentiate between the students who discontinue and those who persist in college studies.

A state-wide study of students who dropped out of high school in Iowa discovered these factors also to be significant at that level.[7]

The presence of these factors in the study of "drop-outs" at various levels of schooling points to the pervasive influence of cultural background influences upon decisions about going to college.

Summary

1. About 15 per cent of a representative sample of top-ranking high school graduates failed to complete two years of college.

2. Reasons for discontinuance reveal a surprisingly high incidence of either lack of interest in or difficulty with college studies.

3. Marriage is a contributing factor among a considerable number of the discontinuing women and financial problems complicated the problems of some of the discontinuing men. On the whole, however, financial problems did not loom as the over-riding cause of the college "drop-outs."

4. The scholastic averages earned by the group as a whole were not distinguished. A fourth of the continuing students placed in the lower half of their college class during two years of work. Three-fourths of the discontinuing students had failed to meet minimum scholastic requirements.

5. There was no significant difference between the discontinuing and continuing students in the size of high school they attended.

6. The parents of discontinuing students differed significantly from the parents of continuing students in occupation and level of education. Fewer of the fathers of the discontinuing students had attended college and fewer still had attended high school. Also, fewer of the fathers of the discontinuing students were in professional, executive, or managerial positions and more were farmers. These are the same characteristics which distinguished those planning to go to college from those who did not have college plans.

7. Case reports of top-ranking students reveal a complex of motivational, financial, and scholastic factors intermingling to cause interruption or discontinuance of college attendance.

8. A special study of the top-ranking students revealed that:

a. Less than half were able to make a B average.

b. Of those who were able to make a B or better average for two years of work, three-fourths had been in the top 10 per cent of their high school class in scholastic aptitude and achievement. On the other hand, one-third of those who ranked in the top 10 per cent failed to make a B or better average.

c. About one out of five students discontinued studies at the University. One-half of these had failed to meet the minimum scholastic requirement (C average).

d. Courses in science and mathematics provided the greatest number of D and F grades for these students with a sprinkling of such grades in English literature, German, and history.

e. The students had taken strong college preparatory programs. The low college grades occurred in fields which the students had specifically studied in high school.

f. About half of the students held university scholarships upon entrance; and from 10 per cent to 15 per cent qualified by university scholastic record for election to freshman honorary societies. But half of the group failed to make a B average—the minimum normally required to qualify for university scholarships available to continuing students.

THE STUDENTS SPEAK

The individual stories of the students who discontinued their college studies best present the complex of circumstances which resulted in their decisions to discontinue their college studies. The case descriptions which follow were constructed from (a) the responses of the graduates to the original questionnaire (My Plans Beyond High School) given just before their high school graduation (spring, 1957); (b) the replies of the parents of the graduates to a follow-up inquiry (What About Education Beyond High School, January and February, 1958); (c) the reports of the registrars of the colleges the graduates attended (spring, 1959); and (d) replies of the graduates to an inquiry sent to them following their discontinuance of college attendance (spring, 1959). Cases were selected which emphasize differing circumstances which influenced decisions to leave college.

Financial Problems

Jim graduated from a small high school in south central Wisconsin at the age of seventeen. His father works in a small factory. His father did not attend high school; his mother attended high school, but is not a high school graduate. He reported at graduation that his family had an average income in comparison with other families in his community, and this estimate was confirmed by his parents. He said that he could afford to go to college but with much sacrifice by the family. His parents wanted very much for him to go to college, and believed that a college education is worth making the financial sacrifice it requires. They emphasized that college is necessary to get and advance in good jobs, and that too many capable young people who desire to go to college are not able to go.

Jim planned to take an engineering course, and entered this course in a university. He had ranked in the top 5 per cent of his class and qualified for a scholarship which paid his tuition for the freshman year. His high school studies had included algebra, geometry, biology, physics, chemistry, English, and history. He earned a 2.7 average for a full year of university studies (A = 4.0). A 3.0 average is normally the minimum required for a scholarship in this school.

He discontinued his studies because he "had to work to get funds." He said that his college experience was very satisfying, but that whether it was worth the time or money depended upon whether he could return, which he hoped to do. He was working in a local factory. He wrote, "I would appreciate a scholarship, and I think my grades are high enough to warrant one."

Alice graduated from a large high school in a metropolitan area. She ranked in the top 10 per cent of her class, and had been cited by her counselors as having unusual scholastic promise in mathematics and science, and leadership potential. Her father has a small business, was a high school graduate and studied in a trade or vocational school. Her mother had attended high school but was not a graduate. She had no older brothers or sisters. Both she and her parents reported their incomes to be the average of families in their community. They expected to provide between $500 and $1,000 toward her first year's college expenses. They believed that her college education was worth making a financial sacrifice and that too many capable young people who desire to go to college are not able to go.

Alice won a four-year scholarship at a private college in Wisconsin, which was approximately equal to the tuition. She attended this college for one year and preregistered for the next year, but did not return. She had made a 2.6 average (A = 4.0). The registrar of her college did not know the reason for her discontinuance. She reported that her experience at her college was satisfying and worth her time and money. Here is her story of her future plans:

"I went to a small college last year. Even with my scholarship it was very expensive and I found I had to work about twenty hours a week to get by. Next year I am going to college X. I have saved enough money to go through the first year without help. I do not want to work during school if at all possible. That leaves little time for studying, much less for extracurricular activities. My problem now is to get money for the last two years. I have been considering a loan to pay back after graduation, but I do not know where to obtain one. I also would like a scholarship, but College X does not give them to transfer students unil they have been there at least a semester."

Robert graduated in the top 10 per cent of a small high school in north central Wisconsin. His teachers cited him as having unusual promise in mathematics. His father is a bartender. Neither his father nor mother is a high school graduate. He reported that it would take much sacrifice for his family to send him to college. His parents reported that Robert was able to go to college the first year because of a scholarship he had earned, but that he would have to change schools the following year because of the expenses. They wanted him to get a college education.

Robert entered a private college in a neighboring state and completed one year there. His scholastic average was 1.3 (A = 3.0). The registrar did not know the reason for his discontinuance. Robert had taken as much mathematics and science as his school offered and had studied other subjects recommended for college preparation. Robert reports that his college experience was satisfying and that he plans to resume his college education in another school. He is now a radio dispatcher in a county sheriff's office. Here is his story:

"I come from a large family and thus my parents cannot help me as much as they would like to. I received a scholarship for my first year of college, but was unable to keep up with the financial burden. At the end of the year I left still owing $200, and thus could not go back to college before paying my debt and getting more money to pay for the coming year. College X is a private school and thus had a high tuition fee. However, after a year there I realized that with or without a scholarship such as mine, it was financially out of the question (for me) to return to college X or a school (with) similar tuition fees.

"So I am planning on working and returning to school this fall, now that I have my debt paid and (will) be able to save ahead a little.

"I plan on attending classes at a state college because it is close to home and therefore enables me to commute. This saves cost of meals and room. Of course, college fees are much lower at the state college."

Scholastic Problems

Shirley graduated from a small high school in northern Wisconsin. Her father operates a small business. He had not attended high school and her mother was not a high school graduate. She reported that her family could afford to send her to college. Shirley's parents agreed with her estimate that her family has the average income of their community. Both parents wanted her to attend college. They were willing to make financial sacrifice to help Shirley go to college, and emphasized the importance of college education to advance in jobs and to be a leader. Shirley wanted to be a teacher. Unfortunately, her high school studies did not include any of the following subjects: algebra, geometry, trigonometry, chemistry or physics, and foreign languages. One year of biology, three years of English, two years of social studies comprised her total preparation in the studies considered basic college preparation. She did not have a scholarship.

Shirley entered a state college and attended one year and a summer session. Her scholastic average was 1.6 (A = 4.0 and the minimum for graduation = 2.0). The registrar reported that she was dropped from school. She reported that her college experience was satisfying, but she did not plan to return to college anywhere. She is working as an airline reservationist. This is her comment:

"There is not enough emphasis placed upon taking courses needed for entrance into college in the freshman year at high school, even if the student does not have college in his mind during the first years in high school."

Barbara graduated from a large high school in an industrial community. Her father is a buyer in a retail business. Both her father and mother were high school graduates and also had attended a trade or business school. Her mother works in a business office. Her parents wanted her to go to college; they emphasized the practical, social, and economic advantages of a college education. They agreed with Barbara that they could afford to send her to college, though with considerable sacrifice.

Barbara entered a university without a scholarship. She attended only one semester, making a scholastic average of 1.1 (A = 4.0 and the minimum average required for graduation = 2.0). Barbara had studied algebra, geometry, biology, chemistry, and physics but had taken only one year of each in high school. She had studied one year of Spanish. The preparation had been in the right subjects but not in the recommended depth in any, except English.

She said her college experience had been satisfying and that she planned to return to the same school. She is now taking a year's course at a secretarial school. She said, "I am returning to college and am anxious to get good grades."

College a Disappointment

Lou graduated in the top 5 per cent of a large class in a metropolitan suburb. Her father is a business executive. He is a high school graduate with additional business school training. Her mother is a high school graduate. Both Lou and her parents reported that their family could afford Lou's education at a college and wanted her to go. Her parents agreed that a college education has advantages but also emphasize that "success in life depends upon ability and effort, not amount of education," and that "going to college is not worthwhile for many who go."

Lou was interested in taking work in business administration and had a $300 scholarship at the university she entered. She attended school for one semester. She reported that her experience was disappointing and questions whether it was worth her time and money. Here are excerpts from her report:

"I was very much disappointed in college. When I got there, I expected to be learning something of practical value. My high school definitely prepared me for college, and yet, my first semester was spent 'preparing me for college.' I desired to learn something definite about the problems and difficulties of business. Instead, I spent my time learning the 'wheat export of Great Britain in 1640,' etc.

"It may be that I was expecting too much from my first year at college, but school is expensive and there is so much to learn in this world. With the exception of my Economic History of Great Britain class and my college algebra course, I was treated as an adult with adult responsibilities. The Econ class was strictly lecture and everyone in the algebra course was 'stupid' because (he) didn't grasp the 'obvious' procedures.

"Another factor in my decision to leave college may have been that I worked as a secretary in the Marketing Department during free hours and enjoyed the work very much. Because college was not offering what I was looking for, I decided to look for a job between semesters. If I could find one without much difficulty, I would leave school. I am sure you know that it was NOT my grades that drove me to make a decision like this.

"I received a job in a general office and have worked myself into becoming secretary to the sales manager. The work is most rewarding and I do not regret one bit that I did not continue in college."

Athletic Scholarships

These students are now attending college (after transfer) but are included because they reveal the special circumstances which operate on talented students.

Alex was graduated from a large high school in an industrial city. In addition to being a top-ranking student, he was cited as being an excellent athlete. His father is a salesman and a college graduate. His mother has attended college. He has no older brothers or sisters. He reports that his family income is the average of families in his community, but that they cannot afford to send him to college. He did report, however, that the family could contribute between $500 and $1,000 toward his first year's college expenses. His parents agreed with this estimate and wanted him to go to college. At high school graduation he reported that college life and activities attracted him very much and he emphasized social values of a college education.

Alex received an athletic scholarship amounting to $1,250 at a college in another state and enrolled in that college. He had taken a somewhat stronger than average college preparatory course. His scholastic average for the year was 2.2, placing him at about the sixtieth percentile among his classmates. At the end of the year, Alex lost his scholarship and was returning to a college in Wisconsin. He said his college experience had been satisfactory. He reports: "I am going to college Z in order to play basketball which I was unable to continue doing at (first college). It is a little less expensive, but I could still use about $700 a year."

Norman was graduated from a medium-sized high school in northern Wisconsin, ranking in the top 5 per cent of his class. He was cited by his teachers as having excellent scholastic promise as well as athletic talent. His step-father was a laborer and his mother held an office job. His father did not attend high school but his mother is a high school graduate and has had additional training in a business school. The family reported it could not afford to send Norman to college, being able to provide less than $500 to his first year's expenses.

Norman was attracted by college life and activities, particularly athletic, and emphasized the economic advantages of a college education and the better opportunities for leadership. These values were echoed by his mother.

Norman had had a somewhat stronger than average preparation for college studies, emphasizing mathematics and science, but he did not report that his studies had been interesting. He wants to major in physical education. He received a full scholarship (tuition, room and board) at an out-of-state college for his freshman year on the basis of both scholarship and athletic prowess. He attended this college for one full year, and the first quarter of the second year, and then discontinued. The registrar did not report the reason for his discontinuance and did not know that he had held a scholarship.

Here is Norman's story:

"I attended college Y on a full scholarship my freshman year. This was a football and scholastic scholarship. During football practice I injured my knee and have since been unable to participate in football. Therefore, my scholarship was not continued into my sophomore year. I attended college Y during the first quarter in 1958, returning to Wisconsin to attend a local college (Z) during the second semester. My return to college Z was for financial reasons. I can stay at home here and that makes college attendance possible. I hope to return to college Y in September, 1959, if I can earn enough to pay my tuition, fees, etc. I still wish to major in physical education and college Z does not offer such a major. My grades have been good, and any failure to return to college will be financial. I do not wish to go into debt unless absolutely necessary as I realize that upon graduation I will be faced with military duty."

Marriage

Ted is included in this group instead of in the financial problems group because he is the only man among the discontinuing students whose college-going problems are complicated by marriage. Ted graduated from a large high school in northern Wisconsin ranking in the top 10 per cent of his class. As he graduated from high school he said he had no definite plans; that he would like to go to college, but that he lacked the necessary funds. His father is a business executive, but is not a high school graduate. His mother is a high school graduate. He reported that his family income is considerably above average and his parents confirmed this report. He has an older sister who is attending college.

He checked many fields of interest, including architecture, chemistry, engineering, fine arts, and aeronautics. He had taken a strong college preparatory program, including science, mathematics, and foreign language, but he does not credit his high school studies as making him want to learn more. He said that "going to college has just been accepted; I have never thought of anything else."

Nevertheless, Ted did not enroll until the second semester of the first year of school following his high school graduation, and discontinued after the first semester of the second year. He had made a 1.1 scholastic average (A = 3.0), about the median of his classmates. His registrar reported:

"I have talked with (his mother) and she feels (Ted) was generally dissatisfied with his own work in college. She feels that his car, his girl friend, and perhaps a lack of maturity may be the causes for his dropping out of school. He states that he plans to return to school."

Ted reported that finances and marriage caused his discontinuance, that his college experience was disappointing, and not worth the time and money. But he planned to return to the same college. He said, "My wife will also be attending college as a freshman this fall. Our first child is expected in July and will also be a burden on my finances."

Ann graduated from a parochial high school in a city in northwestern Wisconsin. She ranked in the top 5 per cent of her class and was cited by her teachers as having excellent promise, especially in the field of speech. Her father is a salesman and a high school graduate. Her mother had attended college. Both she and her parents reported that the family could afford to send her to college. She has an older sister who attended college.

Ann entered a state college with a scholarship which covered her tuition for the freshman year and was planning to specialize in "radio and TV work." Her mother reported, however, that Ann was engaged to be married, adding "the youth of today take so much for granted and are not willing to put forth much effort on their own." She stated that she believed that "going to college is not worthwhile for many young people who go" and that it is better "to learn a job skill, or trade," and placed a premium upon ability and effort rather than education.

Ann attended for one full year before discontinuing, earning a respectable 2.74 average, placing herself in the upper 20 per cent of her class. The registrar reported marriage as the primary reason for discontinuance. Ann said that her college experience was satisfying and worthwhile and that she planned to return to the same college. She is an expectant mother and has this to say about the future:

"College is well worth the time and money put into it. I would have returned the school year of 1958-1959, but like most young married couples, we couldn't afford it. I do plan on finishing my college education as soon as the opportunity arises."

Lack of Goal

Hugh was graduated from a high school in south central Wisconsin. His father is a factory worker who is a high school graduate. His mother did not graduate from high school. He reports that his family can afford to send him to college, providing, with his help, all expenses for the first year. Both father and mother favor his going to college. He had engineering as an objective. He applied for a scholarship but did not receive one.

Hugh attended a private college outside Wisconsin, completing one full year. He earned a .70 scholastic average (A = 3.0). The registrar gave no reason for his discontinuance.

Hugh reported that he discontinued because he was undecided on his course of study but that he found his college experience satisfying and worthwhile. He is now working as a common laborer in a factory. Here is his own story:

"I picked engineering as the course of study which I would follow at college. After the first year, however, I was not entirely satisfied with my grade-point average. I spent a great deal of time trying to find out what was wrong. I came to the conclusion that I was not putting forth my best effort because I had lost interest in my course of study. I found that my poorer subjects throughout my school year were taking too much of my time and I was getting lower grades all the way around as a result. I then decided to look for a job and try to make up my mind as to what I should do next.

"I have now enrolled in an extension correspondence course at the United Electronics Laboratories and I am studying to become an electronics technician.

"I in no way feel that the money I spent (even though it was my own) for the one year of college was in any way wasted; I gained many new outlooks and had many helpful experiences. In many ways I feel it has helped me grow up."

Need for Better Counselling

Tom graduated from a small high school in northwestern Wisconsin, ranking in the top 10 per cent of his class. His teachers cited him as having exceptional promise in science. His father is a factory worker and is a high school graduate. His mother attended high school but is not a graduate. Two older siblings are high school graduates and one brother has attended college. His family could not afford to send him to college, the total family contribution for the first year being less than $500. His parents wanted him to go to college.

Tom's subject matter preparation was somewhat stronger than average. He was awarded a tuition scholarship at a state college and completed the freshman year. His scholastic average was 1.7 (A = 4.0), ranking in the lowest 25 per cent of his class. The registrar gave no reason for his discontinuance. Tom is working to get enough money to go to school, but this time to a junior college. He said his college experience was disappointing and reports:

"The reason I said that college was satisfying yet disappointing is because of the very poor counselling I received. No matter how young or old one may be, there are times when it is necessary for someone to bring problems to. That, of course, is the reason for counselors. I realize that in a larger college it is hard for a counselor to give everyone all the attention (he) might need. However, this lack of counselling can be and sometimes is the downfall of many fine students."

PERSISTENCE AND PROGRESS OF THE ACADEMICALLY TALENTED STUDENTS IN A SINGLE SCHOOL

The largest single group of the academically talented youth had entered The University of Wisconsin (Madison). The full personnel records of these students were available. A separate study of this group of students was made.

The Students

One hundred eleven of the academically talented students entered the University in September, 1957. (Twenty-three additional students transferred to the University after entering other schools: fifteen from in-state schools and eight from out-of-state schools. The transfer students, however, were not included in the study. The time of transfer of the students varied and the marking systems and standards of the schools from which they transferred were different. So it was decided to study only those who first entered the University.) The 111 students came from sixty-five high schools located in fifty-five communities of the state. All regions of the state were represented. Sixty were men and fifty-one were women. The sizes of the schools from which they graduated were: 0-100 graduates, 25; 100-249 graduates, 25; 250 or more graduates, 15.

A further description of the abilities of this group of students is shown in Table 43. This table was constructed by first separating those students who ranked in the top 10 per cent both on mental score and rank in high school graduating class. A further refinement was then made using ratings by the teachers or counselors in the schools. At the time the graduates were completing the questionnaires, the principals were asked to have the appropriate teacher or counselor identify any member in the graduating class who, regardless of intelligence test score or class rank, had demonstrated unusual ability or promise in some special field which indicated that this student should by all means be encouraged to continue his studies beyond high school. About 10 per cent of all the graduates were so identified by their schools, but only one out of five of this group was not also identified by the procedure reported in this study to locate the academically talented student. This identification, however, enabled a breakdown of the information about these students in the following groups:

A. those who were in the top 10 per cent and had been specially identified.
B. those who were in the top 10 per cent but not specially identified.
C. those who were specially identified, but not in the top 10 per cent.
D. those who were neither in the top 10 per cent, nor specially identified.

TABLE 43. Level of Ability and Talents of University Group by Sex

	A*	B*	C*	D*	TOTAL
MEN	16	8	12	29	65
WOMEN	14	14	9	13	50
TOTAL	30	22	21	42	115

**Refer to groups described immediately above; also in Table 44.*

Therefore, 45 per cent of this group had ranked in the top 10 per cent of their classes and 36 per cent had been ranked as having unusual promise in some field.

The students had distributed themselves in the University as follows:

MEN (%)	
Engineering	31
Letters and Science	25
Commerce	9
Education	4
Pharmacy	4

WOMEN (%)	
Letters and Science	42
Education	33
Nursing	10
Home Economics	5
Commerce	5

The percentages shown are in accord with the announced objectives of the students at the time of their original registration. Not all of these students stayed in the courses of their original registration.

How Many Discontinued University Attendance?

In spring, 1959, two years after their original entrance, eighty-seven of the 111 were still enrolled in the University. Four men and one woman had transferred to other schools. Ten men and ten women had discontinued attendance and were not enrolled at another college. Six of the continuing students had withdrawn from the University for at least one term, but had re-entered.

The net loss to the University from this special group of students was 22 per cent and it occurred equally among men and women. (Since four students were continuing studies at other colleges, the net attrition for the entering group was 18 per cent, about the same as for the entire 488 students in this study.)

Some discontinuances came from each of the separate schools or colleges in which the students were enrolled, with no important concentration in any.

Four out of five of the discontinuing students withdrew during or at the end of their first year in the University. Two out of three were men. Less than a third had come from high schools with fewer than 100 graduates;

almost half from large high schools with more than 250 graduates. Half of them had failed to make a C average, the minimum scholastic requirement. One out of five students had made a B or better average. Of those who replied to the inquiry about their reasons for discontinuing, the following reasons were given: financial, 10 per cent; marriage, 33 per cent; academic difficulty, 24 per cent; entered different type of school, 33 per cent. Four out of five of the students had been in the top 10 per cent in high school and two out of five had been identified as having unusual promise in some field.

Because of the small number of students involved, not much should be made of the ratios or percentages reported. The small proportion who indicated financial difficulty as the primary reason for discontinuance, however, is interesting. Some of the girls who had married, however, would have continued school if finances had been available to meet educational costs of both their husbands and themselves.

TABLE 44. Mean Scholastic Averages of Continuing and Discontinuing Students in University

	GROUP A		GROUP B		GROUP C		GROUP D		TOTAL	
	N	M	N	M	N	M	N	M	N	M
CONTINUING										
Men	11	2.9	4	3.2	7	2.8	17	2.5	39	2.8
Women	8	3.2	7	3.2	6	2.9	5	2.7	26	3.0
DISCONTINUING										
Men	3	1.9	2	2.0	4	2.6	8	1.9	17	2.1
Women	2	2.9	2	2.5	2	2.0	5	2.2	11	2.3
TOTAL										
Men	14	2.6	6	2.8	11	2.7	25	2.3	56	2.6
Women	10	3.1	9	3.0	8	2.7	10	2.4	37	2.8

Two important facts stand out in Table 44. First, few students who ranked below the top 10 per cent on both mental test and high school class standing were able to achieve a B or better average in university studies. Of those who had maintained such a scholastic record, only a fourth had not ranked in the top 10 per cent groups. Second, the students who discontinued had made definitely lower scholastic averages. The women students made slightly higher records than the men but these differences were less pronounced.

Less than half of this whole group had been able to maintain a B or better grade in their university work. About 12 per cent reached as high as 3.5 (A = 4.0). Since a B average is normally required for maintaining university scholarships, or being considered for a new one, more than half had disqualified themselves for financial help through university scholarships. Some of the students who left the University reported experiencing this difficulty.

The students specially identified by their teachers did not make significantly higher marks unless they also qualified in the top 10 per cent group. This group did make better records, however, than the students who had not qualified either in the top 10 per cent or in the group specially identified by the teachers.

It appears, therefore, that (1) the definition of the academically talented used in this study is too coarse if the purpose is to select students most of whom will make top university grades; (2) a criterion using the top 10 per cent is much more effective, and when the students who have been identified as having unusual promise in scholarship are added, the screen is still more effective. Such a criterion, if used, however, would have eliminated 25 per cent of the total academically talented group that made B or better averages.

More than a third of those who qualified in the top 10 per cent, however, did not maintain a B or better average, the individual averages being as low as 1.1. Half of those specially identified did not achieve a B or better average, but some of these had been cited for excellence in nonacademic fields rather than in scholarship. Of those who were in neither the top 10 per cent nor the specially identified group, 70 per cent failed to maintain a B or better average, and almost one-third failed to make a C average.

Fifteen students failed to make a C average. In terms of the four subgroups used in this analysis, the composition of the group was as follows: group (A), 2; group (B), 1; group (C), 2; group (D), 10. All of these students discontinued their studies. Twelve were men and three were women. Scholastic problems figured heavily in the attrition from this group.

But some of the continuing students also experienced serious difficulty in some of their university studies. Almost a fourth of the continuing students had been placed on probation because of scholastic deficiency. This normally means that they failed to maintain a C average.

What Subjects Caused the Most Difficulty?

It was decided to determine whether there were certain courses or areas of study which were causing special difficulty for these students.

Ten of these students had entered the College of Engineering. A tabulation of the courses in which the students had made D or F grades was made. The incidence of these grades was: chemistry, 6; mathematics, 9; English literature, 3; engineering drawing, 5; physics, 1.

Four of these students transferred to other schools within the University.

The students enrolled in other colleges received D's and F's in the following courses: German, 2; chemistry, 5; English, 3; history, 1; mathematics, 3; physics, 1.

In general, these are the areas of study which students find most difficult and also the areas in which relatively high proportions of D and F grades are given. It is interesting to speculate whether the difficulty which the students have is in learning the subject or getting the grade.

The total production of A grades in credit courses by this group was eighteen in approximately 130 attempts. The production of F's was thirteen. Eight of these A's were earned by a girl after she had transferred from chemical engineering. One of the other A's was in a one-credit Freshman Forum course and another in a one-credit course in First Aid. Perhaps this student felt that he was in need of emergency treatment!

It is appropriate to ask whether the college preparation of these students had been strong. The record says emphatically, yes, at least in terms of the high school subjects studied. The majority of the students came from high schools which offered a full slate of college preparatory subjects and these students had taken them. Records of thirteen of the students who had been placed on probation at the University revealed:

Number who had taken *mathematics* = 13 (4 units, 3; 3½ units, 2; 3 units, 7; 1 unit, 1).
Number who had taken *chemistry* = 12.
Number who had taken *physics* = 12.
Number who had taken *biology* = 10.
Number who had taken *history* = 13 (3 units, 1; 2 units, 9; 1 unit, 3).
Number who had taken *social studies* = 6 (2 units, 5; 1 unit, 1).
Number who had taken *English* = 13 (4 units, 13).
Number who had taken a *foreign language* = 10 (3 units, 1; 2 units, 9).

It seemed that most of the difficulties occurred in areas where the students had prepared as well as they could in high school. Their general scholastic performance suggested that they should not have had difficulty.

The difficulty for these probation students, however, was in degree only. Many of the students who had not been on probation were making undistinguished records, though not low enough to require being placed on probation.

Of the students who had been placed on probation, about one-half did not do as well in the second year as they had in the first year. Only three of the fifteen probation students had made a significant improvement. Two of these three had transferred to other courses after the first year.

The probation students' places of residence while attending the University were: University residence halls, 4; fraternities or sororities, 3; rooming houses or private homes, 6; own home, 2. In general, the type of residence while attending the University suggests nothing of importance in explanation of the low scholastic records.

Summary

In summary, the University had retained 78 per cent of its academically talented students. The loss was women students who married; students who had withdrawn to earn money; and those who found university studies too formidable or their progress discouraging. Most of the discontinuing students said their university experience was worthwhile, and some planned to return.

Nevertheless, making high grades in the University is an imposing task even for academically talented students. In fact, only when the student ranks in the top 10 per cent of high school seniors in scholastic aptitude and performance does his chance become good to make a B or better average in the University. This target, however, is a small one because only 25 per cent of all university students make this kind of record in the first two years. Since September, 1957, however, the University has enrolled twenty-three academically talented students who have transferred from other schools. The total number of academically talented students enrolled in the University in spring, 1959, was 114, three more than the number who began studies in the University.

About half of these high-ranking students had scholarships awarded by the University. Thirteen per cent of the men were initiated into Phi Eta Sigma, men's honorary fraternity, and less than 10 per cent of the women had been initiated into Sigma Epsilon Sigma, women's honorary sorority.

A surprisingly large number of this group was having considerable difficulty in some studies, particularly in mathematics and chemistry. This difficulty cannot be explained in terms of failure to take strong college preparatory programs in these fields.

An earlier study[8] had shown that about 30 per cent of an entering freshman class is composed of students who are similar in scholastic promise to the sample studied here and that about 75 per cent of them persisted to graduation. The performance of the students used in this study predicts a similar persistence.

A 75 per cent yield of graduates from this group would in general seem good, in view of the unavoidable circumstances which do interrupt college plans. Nevertheless, there is no reason to be complacent about the avoidable losses, caused by (1) financial difficulties, (2) poor or no counselling, or (3) poor articulation between high school preparation and the requirements of college studies.

The situation is not greatly different from that in other colleges. In view of these facts it would seem that, except for lack of effort, fewer academically talented students should be discontinuing college because of a discouraging scholastic performance.

There is little evidence in the record that these students were not as a whole making strong effort. What happens to the motivation of a top-ranking high school graduate who finds himself earning a few B's, many C's, and an occasional D, sometimes skimming along and sometimes dipping below the minimum scholastic requirement? Does it stimulate greater effort? Does it discourage? Does it reconcile good students to lower levels of aspiration? Would greater effort actually produce higher marks or does the practice of relative marking work against it? Does the difficulty in earning a high grade in a subject accurately describe the difficulty in learning the subject, as such? To what extent are able students the victim of grading practices based upon some theoretical curve or arbitrary percentage allocation of the several grades? Would there still be the same proportion of attrition if only the top 10 per cent was admitted? These and other questions occur and recur as the story unfolds about the university experiences of academically talented students.

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REFLECTIONS

Explorations which delve into the realms of human purpose and motivation have the fascination and excitement of a safari. Whether one returns with big game or small fish, the adventure is its own reward. So I come to the end of this research adventure with vivid new impressions and fresh insights into the nature of human decisions about education beyond high school. The paragraphs which follow are reflections upon some of the major findings.

1. The persistent and pervasive way in which the socio-cultural background of the families, especially the educational attainment of the parents, conditions the educational aspirations and attitudes of high school graduates is perhaps the most striking finding about factors which influence the decisions about college attendance. In every phase of this study, this influence stands in bold relief and must be given priority over economic means as a general determinant of college attendance. This priority does not deny existence of financial barriers which deter the college attendance of highly capable youth but the economic barriers are intertwined with such other factors as inadequacy of knowledge about opportunities for self-help, loans, or scholarships, or lack of knowledge about or strong interest in what colleges offer.

2. The importance of the socio-cultural backgrounds of communities as determinants of college-going habits among high school graduates has meaning for state-wide planning of higher education. The findings of these studies suggest that the presence of college opportunities is not in itself sufficient to cause high levels of attendance. Enrollments in some of Wisconsin's state colleges would be relatively small if they did not attract state-wide enrollments. The relatively small enrollments in some Extension Centers are explained by the findings about the areas which they serve.

For predominantly rural areas in Wisconsin, the Extension Center idea fits the facts better than the community college idea. Under the Extension Center plan, a small number of students in each of several communities can be accommodated under circumstances which would deny the establishment of a community college in any single center. The community college idea is better suited for predominantly urban communities and the fringe of metropolitan areas.

3. The focus of this study was upon the 30 per cent of high school graduates who go to degree-granting colleges.* The other 70 per cent should also be remembered. Some of these graduates chose to enter types of training not offered by most degree-granting colleges. Many others had neither interest

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* The yield of college-going graduates in Wisconsin appears low in comparison with figures shown by other states. Counting those who were continuing to schools which offer occupational training of a nondegree type, the yield was 50 per cent, a figure more comparable to that shown for states having junior colleges.

nor aptitude for the kinds of studies which degree-granting colleges offer. Yet these young men and women are moving into a world of work which is placing a premium upon high levels of technical skill and knowledge and into a society which will depend both for its economic welfare and national security upon people of high technical and general intelligence. The needed levels of skill and knowledge are not present in the typical high school graduate. How, when, and where is this education to take place? Is this the province of the community college or as in Wisconsin, of the schools of adult and vocational education? Are training programs of businesses and industries to fill the gap?

4. The concept of the college degree as a union card for entrance into favored occupations and a *carte blanche* to circles of social prestige runs strong in the push to get to college, both among parents and their children. This stress upon the economic and utilitarian advantages of a college education has real basis. The number of occupations open to youth whose education stops at high school is dwindling. The numbers of young men and women who can present credentials showing some college training are increasing. The combined situation enables employers to use colleges as a screen for the selection of potential employees regardless of specific job requirements. In no other element of society is this urge so strong as among the college educated, including college faculty members. In fact, within this group, the issue of concern is not whether their children will attend college, but whether they may attend and stay in the college of their choice. This situation is a reminder of the drive for the high school diploma in the 1920's.

5. Colleges and universities, with individual variations, are cut to the same mold, and have their greatest appeal to students who are attracted by abstract and theoretical studies. Not all students, including the most able ones, are cut to fit the college mold. In general, college academic programs do not match the diversity of aptitudes and interest found among talented students. Some able students turn to extracurricular activities to derive their greatest satisfaction and stimulus.

A great deal of the much discussed pressure for conformity exists within the colleges themselves. Colleges strive to be alike, many consciously or unconsciously seeking to be images of some school of established prestige. It would be wholesome if colleges might elect to be individual, serving special groups of students in special ways. Why does a college dare not suggest that it prefers to educate, not the top 10 per cent of the high school graduates, but the next 15 per cent? Would its contribution to human happiness and social welfare be less important or less significant? Is a community college which prepares technicians, aides, and skilled tradesmen an institution of lower quality than a college which prepares excellent engineers? As John W. Gardner has so rightly pointed out, "We shall have to be more flexible in our conception of excellence. We must develop the point of view that permits each kind of institution to achieve excellence in terms of its own objectives. We reject the notion that excellence is something that can only be experienced in the rarified strata of higher education."[9]

6. The extent to which top-ranking high school graduates do not continue to be top-ranking students in college points up inadequacies in methods of identifying students who have highest promise. In the worthy drive for the identification and better education of talented youth, these studies remind us that human aptitudes, promise, and worth have dimensions not revealed by an IQ or grade-point average. Given students who possess the basic intelligence and scholastic inclinations found in the average college graduate, other human qualities seem crucial in determining ultimate achievement. ,

Current research on the dimensions of intelligence and the qualities which underlie outstanding human achievement bears watching. Pending more definitive knowledge than is now possessed about human promise, the wise course is to provide abundant opportunity for outstanding human ability to rise at any stage in the educational process. This procedure seems wasteful, but if a gold mine finds it profitable to process one ton of ore to secure a half ounce of gold, it seems that human ability should be considered no less precious. The open-door policy squares with the fundamental American belief about the worth of the individual in our society and with the aim that each shall have the opportunity to educate himself to the limit of his capabilities. The findings of this study suggest that the degree of self-selection which takes place at all stages of education beyond high school is itself an effective screen. An individual truly fails in this education only when he fails to make his best effort. Most individuals who attempt college studies know when their best efforts are effective or worthwhile.

7. The difficulties of top-ranking high school graduates in maintaining high performance in college and the resulting discouragement and rate of discontinuance deserve special study. It is wrong to hold that students who discontinue college attendance are failures or that their college experiences were not worthwhile even when they had low marks. With few exceptions, discontinuing students report that their college experiences were satisfying. The change in educational climate from high school to a college or university, however, is abrupt; and unless students have been adequately forewarned and prepared, the shock can be great. Even top-ranking high school graduates shiver and chill in this sudden change of weather. Public elementary and secondary schools are committed to the education of all the children of all the people. These schools measure their excellence by their ability to provide educational programs suited to a wide band of human aptitude and interests. In the accomplishment of this objective, the world has seen no equal. Colleges and universities are selective institutions and emphasize excellence in an important but narrow band of human aptitude. The beginning college student is confronted with a situation like this. In high school he expected to be taught; in college he is often expected to learn without being taught. In high school he may have ranked above more than 90 per cent of his class;

in college he may find one-third of his classmates surpass him. Instead of being introduced to bright ne wand challenging fields of knowledge, he is frequently asked to retrace old and familiar studies. In high school he was frequently marked on the basis of his personal achievement an dprogress; in college he frequently finds himself marked in relation to the achievement of someone else, regardless of his satisfaction with his own progress. In high school, teachers show interest in students rgeardless of level of cholarship; in college many students wonder whether the central interest of the faculty is only in those students who show highest promise in the teacher's own field of knowledge. In this setting, college becomes a race for academic survival.

These important differences between high school and colleges in educational purpose, program, and method create gaps into which promising high school graduates fall. The problems of transition from high school to college are serious. Too many able students are dropping out of college because of academic maladjustment. These problems have implications for curriculum and instruction in college as much as inadequacy of preparation in high school.

8. The quest for education moves on. With each generation the level of schooling attained moves upward. Half of the parents of today's Wisconsin high school graduates were not themselves high school graduates and a third did not even attend high school. Practically all of the sons and daughters of these parents are graduating from high school. Half of those graduating are continuing their education beyond high school. At least one in six of the graduates, and probably more, will earn college degrees. A recent survey of the population of the United States included this interesting comment. "In 1980, the adolescent youngsters who look upon their parents as ignorant and backward individuals, incapable of understanding the world about them, will have less objective evidence upon which to base such a view."[10]

This trend is fed by a persisting faith of our people: first, in the power of knowledge, a power demonstrated by the amazing developments in science, technology, economic productivity, and the amassing of human comforts; and second, in the sustaining belief that if the future is to belong to freedom-loving and self-governing peoples, a high level of informed intelligence, both general and technical, is imperative.

9. The demands of an infinitely expanding world of knowledge, however, pose problems to schools and colleges which are as critical as the problems of the growing population. As it is sometimes put, "We are turning from the task of seeing that all children get into school to the task of seeing what the children get out of school." The total task will require a realistic reappraisal of the portion of our economic effort which is given to the cultivation of human intelligence.

10. Programs of student financial assistance need not be massive to recruit the relatively few highly able boys who strongly desire to attend college

but who do not do so because of lack of money. The search for this type of student needs to be pinpointed, community by community, and the needed assistance arranged. The loss of academically talented girls is much greater, and so are their financial needs. The attitude among girls and their parents that a college education is not as important for women as for men reflects the strong emphasis placed upon the purely utilitarian values of education.

11. Within twenty years, three out of five adults will be high school graduates or will have had one year of college experience.

As the level of educational attainment rises among the parents of future graduates, we can look forward not only to more youth seeking more education, but to a stronger interest and concern about the strength and quality of our schools and colleges. Are not parents who have had a college education more concerned about and critical of schools and their teachers when the education of the teachers is no greater or even less than their own? The current flurry of concern about quality of schools issues largely from the segment of our population which has had the greatest amount of schooling. Does this not foretell that with the rise in the level of education of our adult population, there will be an insistence upon teachers who have stronger preparation for their responsibilities? The increased interest and critical concern will be healthy, and in the long run, the schools and colleges will increase in strength and service.

As a valedictory, I return to a personal educational credo penned as a guest editorial near the close of World War II, shortly before the return of thousands of servicemen to the college campuses. As colleges face new upsurges in college enrollment, this editorial expresses once more the basic educational message of the findings of these studies.

THE LARGE AND THE GREAT [11]

"The true test of civilization, is not the census, nor the size of cities, nor the crops — no, but the kind of man the country turns out."

— Ralph Waldo Emerson

Emerson's statement has point also for schools and universities. An institution of learning is poorly attested when it measures its greatness by counting its degrees by tens, its courses by hundreds, its students by thousands, and its budgets by millions.

The size of a school may proclaim its popularity, but the "size" of the people whom it graduates will proclaim its singularity.

There is much nonsense, too, when men and women are measured by the colleges attended, the degrees attained, the studies pursued. The marks of the educated man are written deep into his personality and character. He is distinguished not only by depth and breadth of knowledge but by his sensitivity toward the good and his appreciation of the beautiful.

He has a hunger for truth and an appetite for learning; but he also has the skill for excellent decision and the will for right action.

The important outcomes of education are deeply human. Education is ever more than schooling. Great teaching is ever more than instruction.

There is danger, therefore, when schools and colleges become Gargantuan. The individual student is likely to become obscure. His educational needs may become indistinct. His schooling may become more mechanical than human.

Colleges and universities throughout the land are soon to be engulfed by unprecedented numbers of students. Fifteen thousand students will clamor for entrance to The University of Wisconsin before next fall. Thousands of others will crowd the portals of other colleges and universities of this state.

These boys and girls are deserving. They are a tremendous number, yet they represent the smaller part of the state's young people whose further education would be (worthwhile) both to themselves and to society.

It is inevitable that for some time, at least, colleges and universities will be large.

The question is, will they be great?

A state university has a mandate for public service and research. These are important functions, but obligation for the welfare and progress of the individual student remains paramount. The educational task is to keep the human being as its focus; to make grand men and women out of promising boys and girls.

The obligation for student welfare pervades every office and classroom, the halls of learning and the halls of living.

Great schools have faculty members who know and enjoy their students as well as they know and enjoy their books and laboratories. They have administrative officers who do not mistake rigidity of regulations for rigorousness of standards. They use methods which encourage citizenship as much as scholarship. They have students who understand that education is an achievement and not a gift – that the path to success is a staircase and not an escalator.

Schools are great when they enable students to study and live, not with great numbers of people, but with numbers of "great" people.

The growing demand for higher education is a challenge to educators and to the state. It is a challenge to the imagination, ingenuity, and resourcefulness of educators to provide for the important educational needs of individual students while instructing them in masses. It is a challenge to the vision of our citizenry to provide the broad policies, programs, and resources which will guarantee to itself truly educated men and women.

As we make large plans for the education of the large numbers who will be seeking it, we must be sure to plan for greatness.

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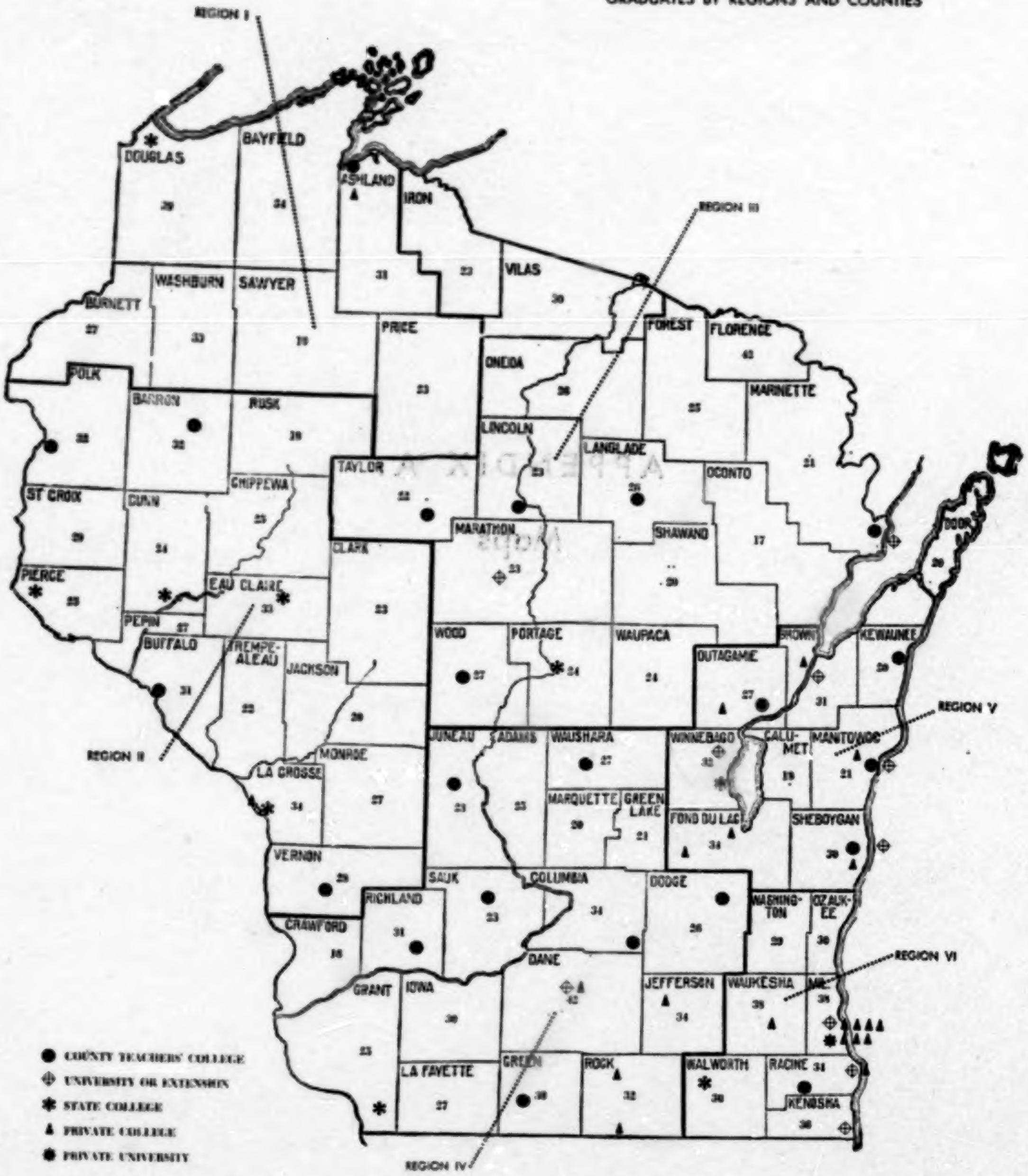
APPENDIX A:

Maps

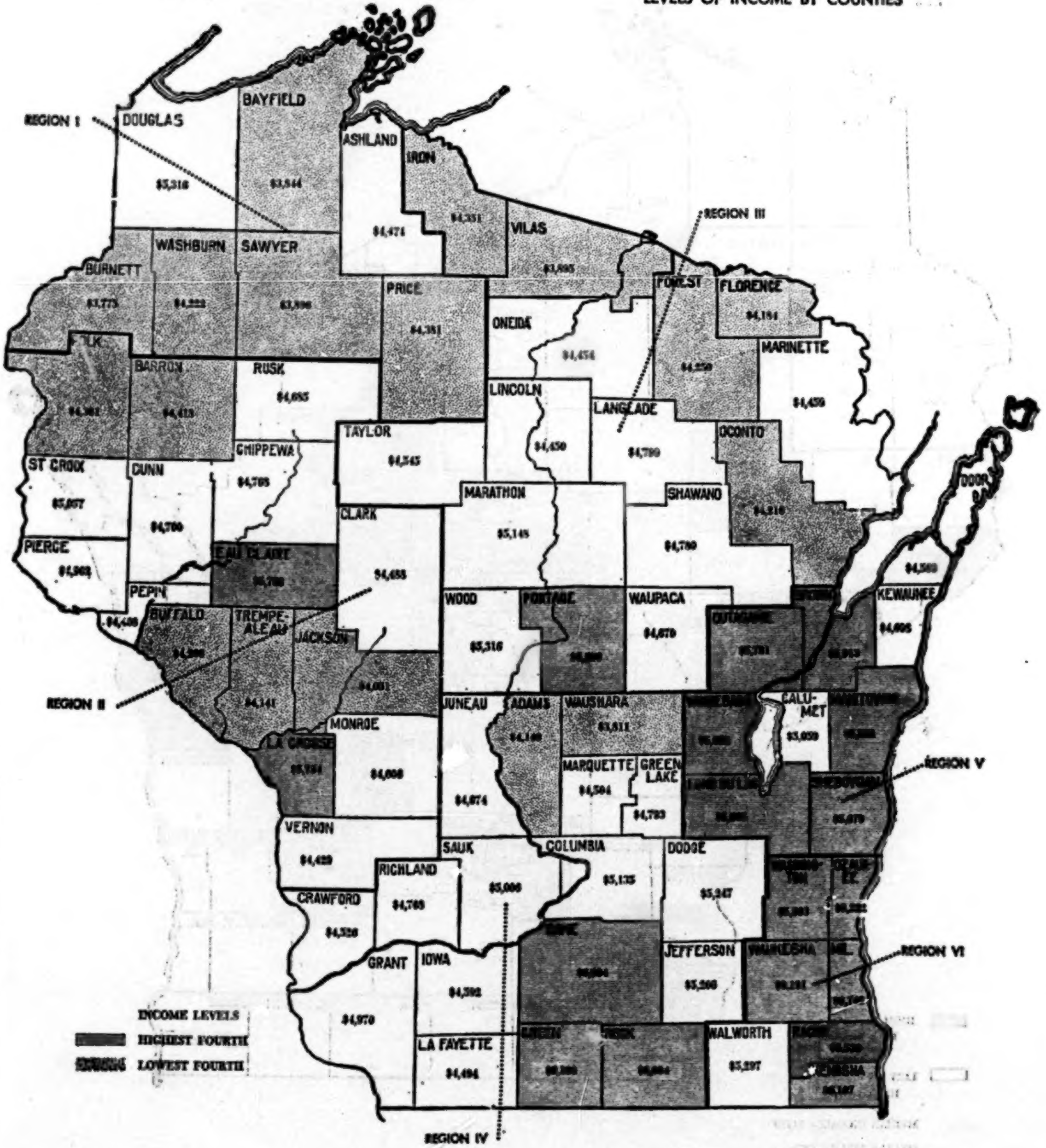
MAP A

YIELD OF COLLEGE-GOING HIGH SCHOOL GRADUATES BY REGIONS AND COUNTIES


REGION I
REGION II
REGION III
REGION IV
REGION V
REGION VI
DOUGLAS
BAYFIELD
ASHLAND
IRON
VILAS
WASHBURN
SAWYER
BURNETT
PRICE
ONEIDA
FOREST
FLORENCE
MARINETTE
POLK
BARRON
RUSK
LINCOLN
LANGLADE
OCONTO
TAYLOR
ST CROIX
DUNN
CHIPPEWA
MARATHON
SHAWANO
DOOR
CLARK
PIERCE
EAU CLAIRE
PEPIN
BUFFALO
TREMPEALEAU
JACKSON
WOOD
PORTAGE
WAUPACA
BROWN
KEWAUNEE
OUTAGAMIE
JUNEAU
ADAMS
WAUSHARA
WINNEBAGO
CALUMET
MANITOWOC
LA CROSSE
MONROE
MARQUETTE
GREEN LAKE
FOND DU LAC
SHEBOYGAN
VERNON
SAUK
COLUMBIA
DODGE
WASHINGTON
OZAUKEE
RICHLAND
CRAWFORD
DANE
GRANT
IOWA
JEFFERSON
WAUKESHA
MIL.
LA FAYETTE
GREEN
ROCK
WALWORTH
RACINE
KENOSHA
● COUNTY TEACHERS' COLLEGE
⊕ UNIVERSITY OR EXTENSION
✱ STATE COLLEGE
▲ PRIVATE COLLEGE
✸ PRIVATE UNIVERSITY

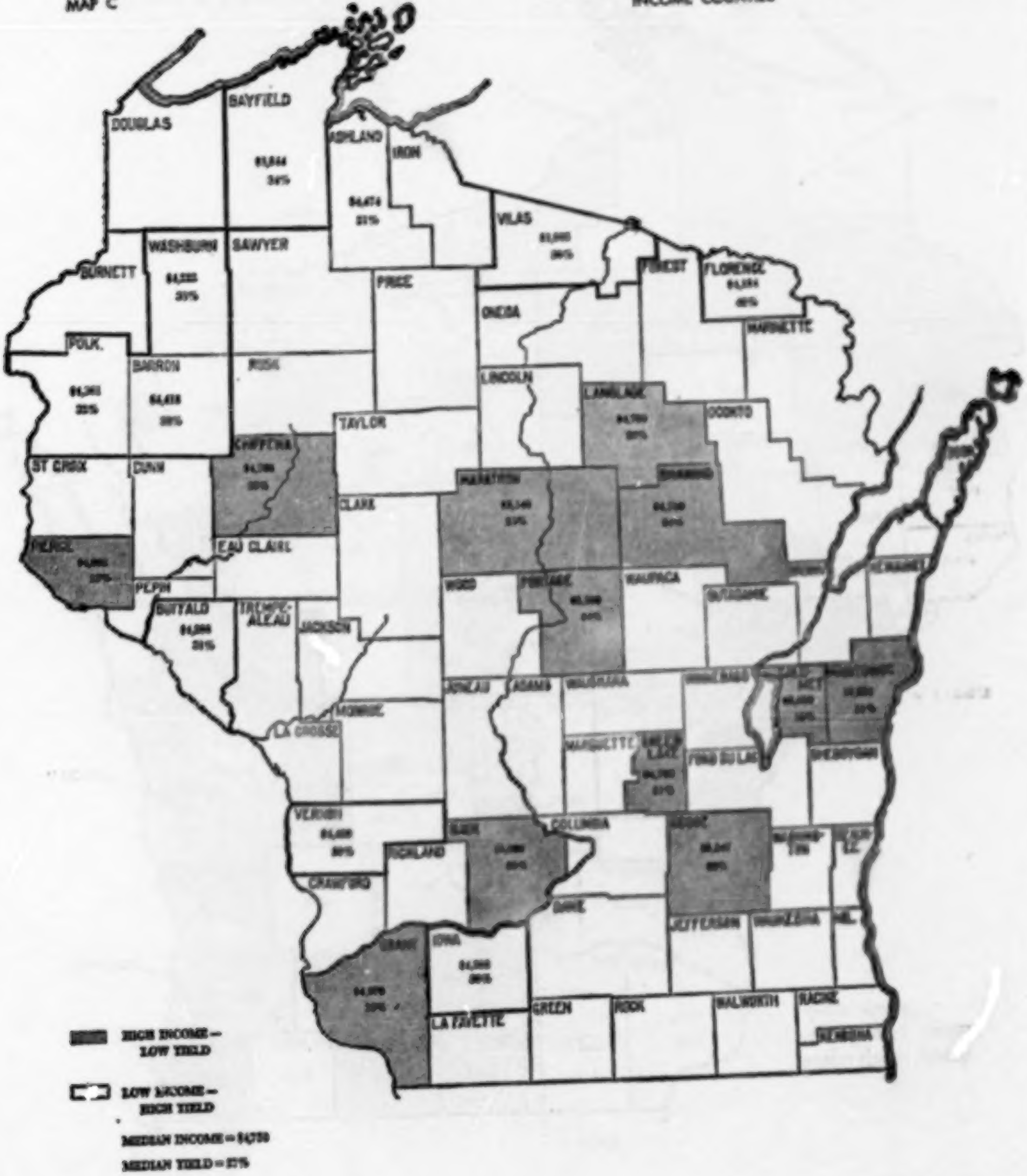
MAP B

LEVELS OF INCOME BY COUNTIES


REGION I
REGION II
REGION III
REGION IV
REGION V
REGION VI
DOUGLAS
$5,316
BAYFIELD
$3,944
ASHLAND
$4,471
IRON
$4,351
VILAS
$3,895
BURNETT
$3,775
WASHBURN
$4,222
SAWYER
$3,990
PRICE
$4,381
ONEIDA
$4,454
FOREST
$4,250
FLORENCE
$4,184
MARINETTE
$4,459
POLK
$4,361
BARRON
$4,413
RUSK
$4,695
LINCOLN
$4,650
LANGLADE
$4,790
OCONTO
$4,210
TAYLOR
$4,545
CHIPPEWA
$4,795
ST CROIX
$5,057
DUNN
$4,700
PIERCE
$4,962
EAU CLAIRE
PEPIN
$4,406
BUFFALO
TREMPE-ALEAU
$4,141
JACKSON
$4,051
CLARK
$4,655
MARATHON
$5,148
SHAWANO
$4,780
DOOR
$4,560
KEWAUNEE
$4,695
WOOD
$5,316
PORTAGE
WAUPACA
$4,670
OUTAGAMIE
JUNEAU
$4,074
ADAMS
$4,140
WAUSHARA
$3,811
CALU-MET
$5,059
MARQUETTE
$4,504
GREEN LAKE
$4,783
MONROE
$4,606
LA CROSSE
VERNON
$4,429
RICHLAND
$4,765
CRAWFORD
$4,326
SAUK
$5,006
COLUMBIA
$5,135
DODGE
$5,247
JEFFERSON
$5,266
WALWORTH
$5,297
GRANT
$4,970
IOWA
$4,392
LA FAYETTE
$4,494
INCOME LEVELS
HIGHEST FOURTH
LOWEST FOURTH

MAP C

DIFFERENCES IN YIELD IN HIGH AND LOW INCOME COUNTIES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TREMPE-ALEAU
JACKSON
JUNEAU
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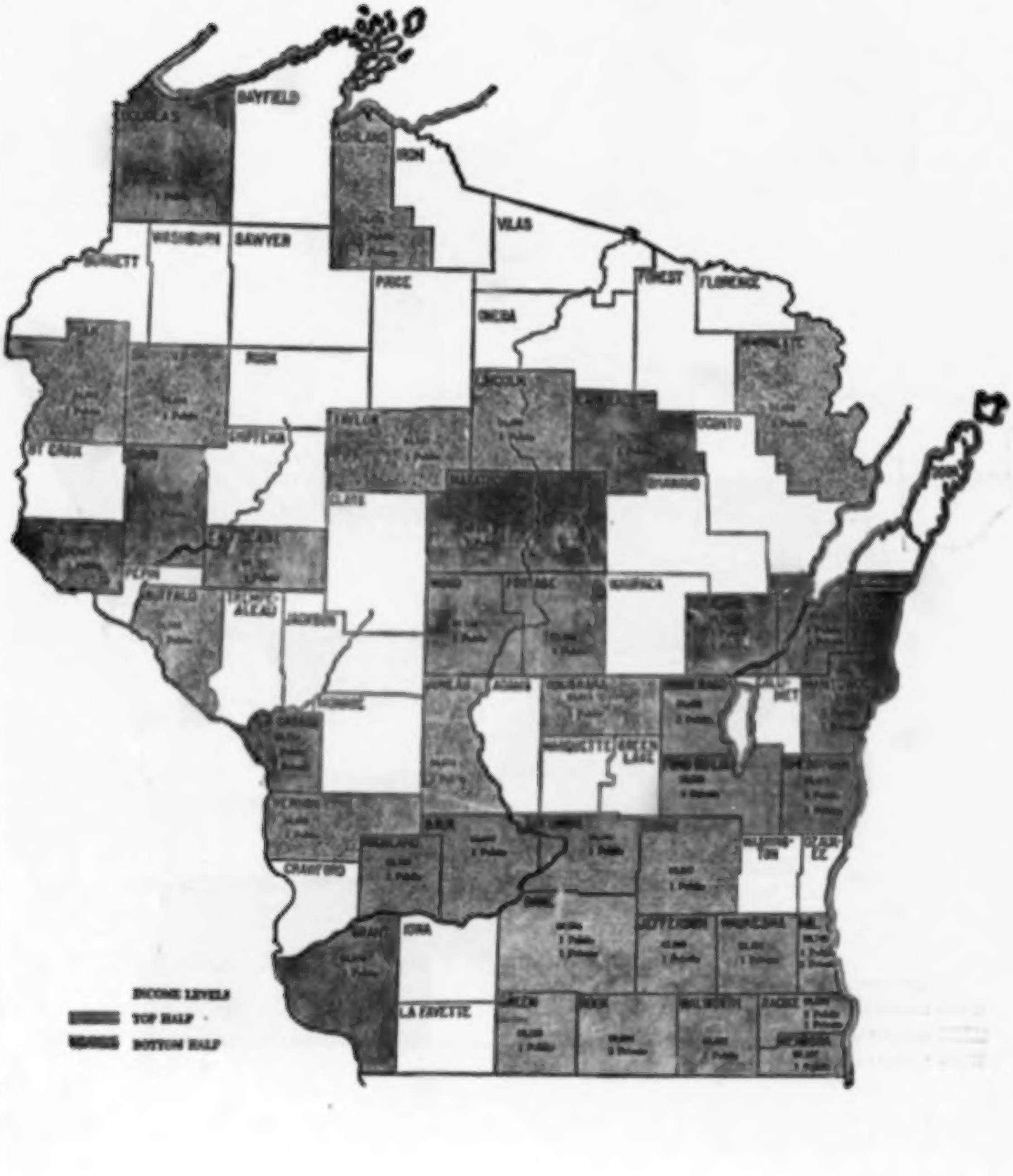
WAUSHARA
WINNEBAGO
MANITOWOC
MONROE
LA CROSSE
MARQUETTE
GREEN LAKE
FOND DU LAC
SHEBOYGAN
VERNON
RICHLAND
SAUK
COLUMBIA
DODGE
CRAWFORD
DANE
JEFFERSON
WAUKESHA
GRANT
IOWA
LA FAYETTE
GREEN
ROCK
WALWORTH
RACINE
KENOSHA
HIGH INCOME – LOW YIELD
LOW INCOME – HIGH YIELD
MEDIAN INCOME = $4,750
MEDIAN YIELD = 27%

MAP D

LOCATION OF COLLEGE OPPORTUNITIES IN TERMS OF INCOME LEVEL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WASHBURN
SAWYER
BURNETT
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FLORENCE
ONEIDA
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LINCOLN
TAYLOR
CHIPPEWA
OCONTO
ST CROIX
DOOR
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SHAWANO
PEPIN
BUFFALO
TREMPE-ALEAU
JACKSON
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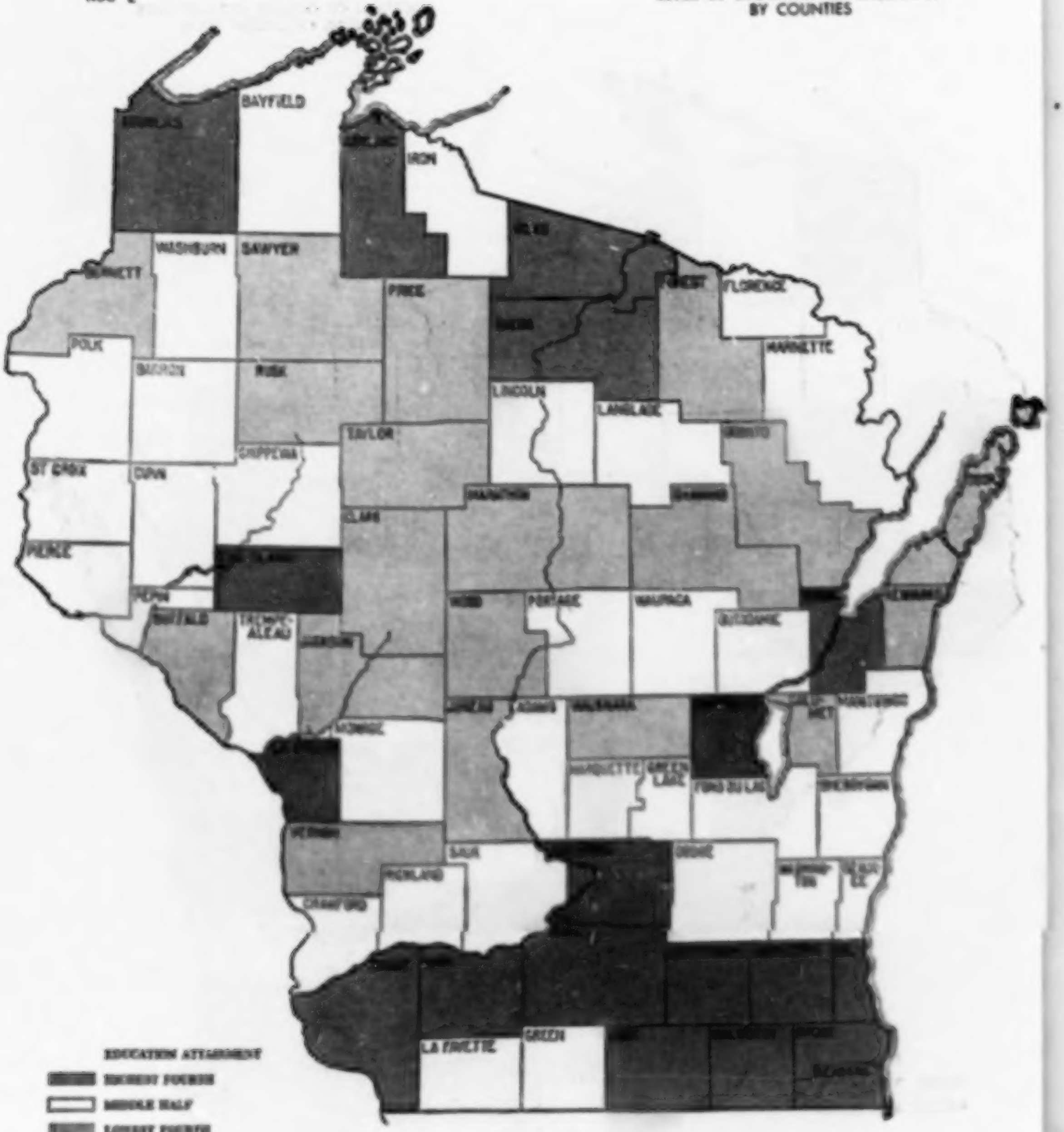
WAUPACA
MONROE
ADAMS
CALU-MET
MARQUETTE
GREEN LAKE
CRAWFORD
WASHING-TON
OZAU-KEE
GRANT
IOWA
DANE
JEFFERSON
WAUKESHA
MIL.
LA FAYETTE
GREEN
ROCK
WALWORTH
RACINE
KENOSHA
INCOME LEVELS
TOP HALF
BOTTOM HALF

MAP E

LEVEL OF EDUCATIONAL ATTAINMENT BY COUNTIES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BAYFIELD
ASHLAND
IRON
VILAS
BURNETT
WASHBURN
SAWYER
PRICE
ONEIDA
FOREST
FLORENCE
POLK
BARRON
RUSK
MARINETTE
LINCOLN
LANGLADE
TAYLOR
OCONTO
ST CROIX
DUNN
CHIPPEWA
MARATHON
SHAWANO
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TREMPE-ALEAU
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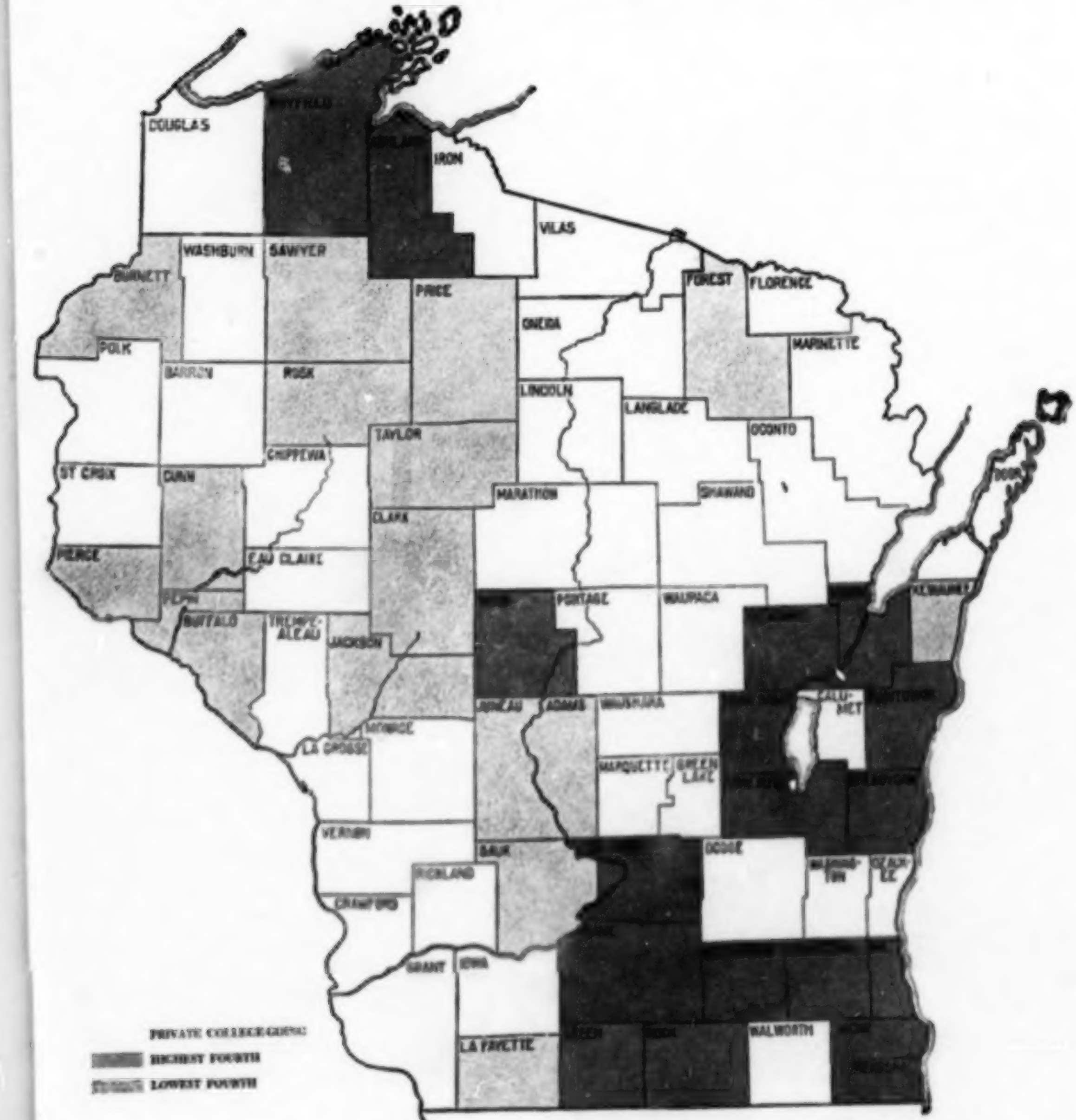
WAUPACA
OUTAGAMIE
KEWAUNEE
MONROE
JUNEAU
ADAMS
WAUSHARA
CALUMET
MANITOWOC
MARQUETTE
GREEN LAKE
FOND DU LAC
SHEBOYGAN
VERNON
SAUK
RICHLAND
DODGE
WASHINGTON
OZAUKEE
CRAWFORD
LA FAYETTE
GREEN
KENOSHA
EDUCATION ATTAINMENT
HIGHEST FOURTH
MIDDLE HALF
LOWEST FOURTH

MAP F

PROPORTIONS OF COLLEGE-GOING GRADUATES ATTENDING PRIVATE COLLEGES


DOUGLAS
BAYFIELD
ASHLAND
IRON
VILAS
BURNETT
WASHBURN
SAWYER
PRICE
FOREST
FLORENCE
POLK
BARRON
RUSK
ONEIDA
MARINETTE
LINCOLN
LANGLADE
OCONTO
TAYLOR
CHIPPEWA
ST CROIX
DUNN
MARATHON
SHAWANO
DOOR
PIERCE
CLARK
EAU CLAIRE
PEPIN
BUFFALO
TREMPE-ALEAU
JACKSON
PORTAGE
WAUPACA
KEWAUNEE
JUNEAU
ADAMS
WAUSHARA
CALU-MET
MANITOWOC
MONROE
LA CROSSE
MARQUETTE
GREEN LAKE
SHEBOYGAN
VERNON
SAUK
DODGE
WASHING-TON
OZAUK-EE
RICHLAND
CRAWFORD
GRANT
IOWA
LA FAYETTE
GREEN
ROCK
WALWORTH
KENOSHA
PRIVATE COLLEGE-GOING
HIGHEST FOURTH
LOWEST FOURTH

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APPENDIX B:

Questionnaires

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Do not write in this col.

HSR ______
HN ______

MY PLANS BEYOND HIGH SCHOOL

1-6 ______
7-8 ______

Name ______ Age ______ M ______ 9-10 ______
F ______ 11 ______
School ______ Home address ______ 12 ______
______ Father's name ______
(or other parent or guardian)

1. I plan: (Place a cross (x) before the statement which describes what you plan to do next year)

______ To continue going to school
______ To get a job
______ To become an apprentice
______ To go into military service
______ To work at my home
______ I have no definite plans
______ (Other, specify) ______ 13 ______

If the plan you have checked is not what you would really like to do, place an (L) in front of the statement above which described what you would most like to do, then state what circumstances prevent you from doing what you would most like to do. ______ 14 ______ 15 ______

How sure are you that you will be doing what you plan?

______ certain ______ uncertain 16 ______

2. If you checked that you plan to go to school next year, what kind of school do you plan to attend?

Public	Private
______ Vocational school	______ Liberal arts college
______ County teachers' college	______ University
______ State college	______ Business or trade school
______ University	______ Other ______ (Specify)

17 ______

Do you plan to attend school outside Wisconsin? ______ yes ______ no 18 ______
I plan to attend school ______ full-time ______ part-time 19 ______

3. If you plan to continue your schooling or training, answer the items below. If not, go to question 4.

I plan to enter the following courses or fields:

In trade or vocational school ______ ______
Specify field or training

Apprenticeship ______
Specify field or trade

College or university: (check the field of your interest)

______ Agriculture
______ Architecture
______ Aeronautics
______ Business
______ Chemistry
______ Dentistry
______ Undecided
______ Engineering
______ Fine Arts
______ Forestry
______ Home Economics
______ Journalism
______ Law
______ ______ (Other)
______ Liberal Arts
______ Medicine
______ Nursing
______ Pharmacy
______ Social Work
______ Teaching
______ Veterinary

20-21 ______

4. If you plan to get a job next year, check the statement below which applies to you.

______ I have applied, but do not yet have a job
______ I have applied and have been accepted
______ I have not applied
______ I will continue in a job I now have
______ Other ______

My job will be: (describe) ______ 22-23 ______
(Name of firm) ______
It will pay about ______ per week 24 ______

5. To what extent have you discussed your plans with your teachers or school counselors?

______ not at all ______ some ______ very much

How much did they influence your plans?

______ not at all ______ some ______ very much 25 ______

6. To what extent have you discussed your plans with your parents?
______ not at all ______ some ______ very much
How much did they influence your plans?
______ not at all ______ some ______ very much 26.______

7. Education of father and mother (check higest level attained)

	Father	Mother	
High School:			
did not attend	______	______	
attended	______	______	
graduated from	______	______	
Trade or business school:			
attended	______	______	
College:			
attended	______	______	
graduated from	______	______	
has master's or Ph.D. degree	______	______	27.______
Do not know	______	______	28.______

8. Education of older brother and sister who have had most schooling. (Check the highest level reached; if more than one, show number at each level.)

	Brother	Sister	
Some high school	______	______	
High school graduate	______	______	
Some college	______	______	
Attending college	______	______	
College graduate	______	______	29.______
Attending graduate school (or attended)	______	______	
None older	______	______	30.______

9. (a) My father is engaged in the type of occupation checked in the left hand column below.
(b) I hope eventually to enter the type of occupation checked in the right hand column below.

Father		Me	
______	Office work (cashier, clerk, secretary, bookkeeper, etc.)	______	
______	Professional (doctor, lawyer, minister, teacher, etc.)	______	
______	Executive (manages large business, industry, firm)	______	
______	Factory worker (laborer, janitor, farm hand, etc.)	______	
______	Salesman (insurance, real estate, auto, store, etc.)	______	
______	Owns, rents, manages small business (store, station, newspaper, cafe, etc.)	______	31.______
______	Owns, rents, manages farm	______	
______	Other occupation (be specific) ______________________	______	32.______

(c) If your mother has a job outside the home, place an (M) before the type of occupation in which she works. 33.______

10. How much do you think it costs per school year to attend college away from home?
______ Less than $1000 ______ Between $1500 and $2000
______ Between $1000 and $1500 ______ More than $2000 34.______

11. How do you estimate the ability of your parents to help you go to college, if you desire to go?
______ can easily afford it ______ cannot afford it
______ can afford it, but with much sacrifice ______ I must work to help support the family 35.______

12. In terms of income or wealth of families in my community, I think my family is:
______ considerably above average ______ average
______ somewhat above average ______ somewhat below average
______ considerably below average 36.______

13. (a) Have you ever considered attending college? ______ yes ______ no
(b) If no, would you consider it if you had the money? ______ yes ______ no 37.______
(c) Would you borrow money for college expenses if you could pay it back on the installment plan after leaving college? ______ yes ______ no 38.______
(d) About how much could you or your family contribute to your college expenses next year (if you were going)?
______ None ______ less than $500 ______ Between $500 and $1000
______ between $1000 and $1500 ______ all my expenses 39.______

14. Did you apply for admission to a school or college? (Check the statements which apply to you)

_____ I have not applied **_____ I have applied but have not heard**
_____ I have not applied, but plan to **_____ I plan to apply**
I have applied but was refused because: **_____ I have been tentatively admitted, and expect to attend:**
_____ I did not rank high enough
_____ I did not take the right subjects
_____ The school could not take more students

_______________ (Name of School(s)) **_______________ (Name of School)** **40._____**

I sent applications to _______________ (number) schools **41._____**

15. Did you take the National Merit Scholarship Examinations? _____ yes _____ no **42._____**

16. Did you take the College Entrance Board Examinations: _____ yes _____ no
_____ Scholastic Aptitude Test
_____ Subject matter in (fields) _______________ **43._____**

17. Have you ever applied for a scholarship?
_____ I did not apply
_____ I have applied, but have not yet heard
_____ I have applied, but was not successful
I have received a scholarship from:
_____ a college _______________ (Name)
_____ company or corporation _______________ (Name)
_____ organization or society _______________ (Name)
_____ other **44._____**

18. The scholarship or awards I have will pay the following part of my college expenses next year:
_____ tuition, one semester **_____ tuition, plus $_____**
_____ tuition, both semesters **_____ $_______________ (cash)**
_____ all expenses **45._____**

19. If you are going to school next year what part of your school or college expenses do you expect to provide from summer earnings or part-time work at school?
_____ Less than $250 **_____ Between $500 and $750**
_____ Between $250 and $500 **_____ More than $750** **46._____**

20. Has marriage or the early prospect of marriage influenced your plan for next year? _____ yes _____ no **47._____**

21. Place a circle around the number of semesters in which you studied the following subjects

Algebra	**0 1 2 3 4**	**English**	**0 2 4 6 8**	**48-53._____**
Geometry	**0 1 2 3 4**	**History**	**0 2 4 6 8**	
Trigonometry	**0 1 2 3 4**	**Social Studies**	**0 2 4 6 8**	
Biology	**0 1 2 3 4**	**Foreign Language**	**0 2 4 6 8**	
Chemistry	**0 1 2 3 4**	**Specify Language(s) _____**		**54-57._____**
Physics	**0 1 2 3 4**			

Did you take a college preparatory course? _____ yes _____ no **58._____**

22. Did your high school give you practice in the following college-type experiences? (Check those in which you had considerable experience)
_____ Taking notes from lectures
_____ Writing term reports
_____ Taking final semester examinations during a scheduled period
_____ Making individual studies with oral reports
_____ Long-term assignments
_____ Planning own use of study time rather than required study period
_____ (If other, describe) _______________ **59._____**

23. **For the work I want to do, a college education is:**
_____ necessary _____ desirable _____ unnecessary 60._____

24. **My teachers in high school have:**
_____ encouraged me to go to college
_____ discouraged me from going to college
_____ have had no effect on my decision 61._____

25. **My parents:**
_____ want me to go to college _____ do not care whether I go
_____ do not want me to go _____ will not let me go 62._____

26. **Most of my friends are:**
_____ going to college _____ going into military service
_____ getting jobs _____ other _____ 63._____

27. **High school studies:**
_____ have been interesting; I want to learn more
_____ have been uninteresting; I would rather work than study
_____ have had no especial influence upon my plans 64._____

28. **The prospect of military service: (boys only)**
_____ has influenced me to attend college and join the ROTC
_____ has made me uncertain about my future plans
_____ has caused me to plan a military career
_____ has had no influence upon my plans

29. **The fact that boys must go into military service: (girls only)**
_____ has caused me to be unsettled in my plans
_____ has had no influence upon my decisions
_____ has caused me to plan to enter military service too 65._____

30. **Which of the following statements best describe your opinion of the value of going to college? (Answer whether you plan to go to college or not. Check the 3 statements which seem most important to you.)**
_____ I would rather start earning money quickly, and learn on the job
_____ I (am) would be greatly dissatisfied to stop at my present level of knowledge
_____ College life and activities (like athletics) attract me very much
_____ College graduates get jobs with better pay
_____ The country needs more people who have highly developed skills and knowledge
_____ College is a good place to meet a worthy life mate
_____ Skilled laborers get paid as much as most college graduates
_____ Going to college enables you to study more lines of work before deciding on a career
_____ A college education helps you live a happier, more complete life
_____ Going to college costs more than it is worth
_____ College studies will make you work at a high intellectual level, and I like that
_____ College graduates usually have the leadership positions
_____ Learning on a job is more practical than most school learning
_____ Persons who do not have college educations often make better leaders
_____ College life broadens you socially, and develops your personality
_____ Success in life depends upon ability and effort, not amount of education
_____ Going to college would be a waste of time for me
_____ Going to college has just been accepted; I have never thought of anything else 66+_____

WISCONSIN STATE DEPARTMENT OF PUBLIC INSTRUCTION
AND
SCHOOL OF EDUCATION, UNIVERSITY OF WISCONSIN

April, 1957

WHAT ABOUT EDUCATION BEYOND HIGH SCHOOL?

TO THE PARENTS: Please give the answers to the questions or statements below which correctly or best describe the fact or opinion requested. Either the father or mother may respond, or the answers may be given jointly. Place a check (✓) in front of your answer, or write answer in space provided.

1. a. My son (or daughter) who graduated from high school last Spring:

______ has a job

______ is in military service

______ is married and is a homemaker

______ is continuing education through correspondence study

______ is unemployed

______ is going to school

______ ____________________________ (other)

b. If he (or she) is going to school, is he (or she) going ______ full time?

______ part time?

2. If your son (or daughter) is going to school, please give the following information·

____

Name of School or College City State

____

Course (Such as liberal arts, business, law, nursing, teaching, home economics) (If taking trade or apprentice training, name the trade.)

3. Did you want your son (or daughter) to continue his education beyond high school?
______ yes ______ no

4. If you wanted your son (or daughter) to continue his schooling and he (or she) is not doing so, what prevented it? (If you answered "no" to question 3, skip this question, and go to question 5.)

______ he (or she did not want to

______ plans to go at a later date

______ did not qualify for admission

______ his best friend(s) did not go

______ could not afford it

______ could not find satisfactory place to live at the school

______ no school of type wanted is closely available

______ ____ (other) specify

5. If you did not want him (her) to continue schooling, what was the major reason?

______ Wanted him to help with my business (or work at home)

______ Wanted him to enter military service

______ Wanted him to get a job and earn money

______ Further education is too much a luxury

______ College life is not a good influence

______ Costs too much

______ Family needs income he could earn

______ Is not a strong student

______ ____ (if other reason, please state)

6. a. Did you advise your son (or daughter) to prepare for college? ______ yes ______ no

b. Did your son (or daughter) take the following subjects in high school? (check those which he or she took) ______ Algebra ______ geometry ______ foreign language

(Please turn to other side)

7. In terms of income or wealth of families in our community, our family is:

______ above average ______ average ______ below average

8. The following statements are opinions which some people hold about the value of a college education. Please check the statements which most closely express your own opinions. If none of these statements express your opinion, write your opinion in the blank space at the end of the list.

______ It is better to learn a job skill or trade than to go to college.

______ A college education is worth making the financial sacrifice it requires.

______ Success in life depends upon ability and effort, not amount of education.

______ Persons who do not have a college education are at a social disadvantage in life.

______ Going to college costs more than it is worth.

______ The school of "hard knocks" is more valuable than a college education.

______ A college education is required to get good jobs and to advance in them.

______ You do not need a college education to earn good money and be leaders in your communities.

______ People with a college education live more satisfying and interesting lives than those without a college education

______ Too many young people are going to college.

______ Too many capable young people who desire to go to college are not able to go.

______ Going to college is not worth while for many young people who go.

______ People who learn on the job, use libraries, and teach themselves are as well-educated as those who go to colleges.

______ ____

______ ____

(Use the space above to state any other opinion or information which you may wish to give.)

9. Who gave the answers? ______ father ______ father and mother jointly

______ mother ______ ____________________

(other)

THANK YOU VERY MUCH

Joint Staff
Co-ordinating Committee for Higher Education
High School Parent Survey
October 1957

CODE NO. ______________________ **INSTITUTION** ______________________

FOLLOW-UP SURVEY
WISCONSIN HIGH SCHOOL GRADUATES, 1957

Student: ______________________ **Home address:** ______________________

____

1. Is this student now enrolled in your institution? **Yes** ______ **No** ______

2. Check below each term in which he was enrolled:

1957-58	**1958-59**
______ **First semester or quarter**	______ **First semester or quarter**
______ **Second semester or quarter**	______ **Second semester or quarter**
______ **Third quarter**	______ **Third quarter**
______ **Summer, 1957**	______ **Summer, 1958**

3. If this student is not now enrolled:

(a) Do you know the primary reason for his discontinuance?

Yes ______ **No** ______

If "Yes", check the reason below:

______ **1. Transferred to another school**	______ **6. Illness**
______ **2. Financial problems**	______ **7. Other**
______ **3. Scholastic difficulty**	**Specify** ______________________
______ **4. General dissatisfaction**	______________________
______ **5. Family moved**	______________________

(b) Did he request a transcript be sent to another school?

Yes ______ **No** ______

If so, what college? **Address:** ______________________

Name: ______________________ ______________________

4. Describe in terms of grade point average, quality point ratio, or other such index, the quality of work this student has done: ______________________

____

What percent of your students normally exceed this mark?

______________________ **(estimate)**

5. Has your school, at any time, given this student:

(a) A scholarship, prize, or award?	**Yes** ______	**No** ______
(b) A student loan?	**Yes** ______	**No** ______
(c) Part-time employment?	**Yes** ______	**No** ______

6. If this student is distinguishing himself in some way, what field or activity? ______________________

____

7. What is the college address of this student?

____

(Please use other side for additional information which you think is useful)

WISCONSIN SURVEY OF COLLEGE PLANS

Joint Staff, Coordinating Committee for Higher Education
Madison, Wisconsin

Dear

You are one of Wisconsin's high school graduates of 1957 whose progress we have been following with considerable interest as a part of a state-wide study of what happens to Wisconsin's promising youth. At the time of your graduation, you were identified as an excellent student, and you indicated that you planned to continue your studies in college.

We have since learned that your college plans were interrupted. In planning ways to enable young people like yourself to reach their educational goals, it is important to know the circumstances which block their progress, or become handicaps to their achievement.

You will greatly help us if you will check your answers to the questions which I have written at the bottom of this letter and return it to me in the stamped envelope which I have enclosed. You do not need to sign your name. I shall be pleased if you make additional comments about your college experience, but I am not asking you to do so. This information is never used in any way which identifies the individual who provides it.

Sincerely yours,
J. KENNETH LITTLE
Joint Staff

714 State Office Building
Madison, Wisconsin
May 12, 1959

1. Do you plan to return to college? Yes _____ No _____. If yes, _____ to same college _____ to another college. If another college, _____ much bigger _____ much smaller _____ same size. What type _____ liberal arts _____ teachers _____ university _____ technical _____ other, specify _______________

2. What is the major reason you are not attending college? _____ disliked college _____ health _____ financial _____ marriage _____ preferred to work _____ college studies too difficult _____ other, specify _______________

3. If financial problems are the major reason, what amount of help would you need per year to return to college? _____ less than $500 _____ $500-$999 _____ more than $1000. If you had a scholarship for the amount you need, would you return to college? _____ yes _____ no. What part of the amount you need would you borrow if you could pay it back after graduation or a long term installment plan? None _____ ¼ _____ ½ _____ ¾ _____ all _____ Did you have a scholarship at your college? yes _____ no _____. Was it for first year only? yes _____ no _____. What was the cash value per year of your scholarship? _______________

4. Did your high school studies prepare you for college work? yes _____ no _____

5. Was your college experience _____ satisfying _____ disappointing.

6. Was going to college worth your time and money? yes _____ no _____

7. What is your present activity? _______________

COMMENTS (optional) _______________